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Introduction

Imagine you are a gold miner. Not a hobbyist gold miner panning in the nearest river, but a professional miner using his experience and calloused hands to dig deeper and deeper in search of precious metal. Shifting and drilling the earth is difficult, backbreaking, and dangerous work, but that's how it's always been done.

Now imagine you came to possess a new, advanced scanning tool that maps out every piece of gold within the ground-from the daintiest flakes to the most colossal nuggets-all without penetrating the surface. Your scanner identifies possible hazards like thick layers of lead that would make attaining that gold impossible. And with this scanner, you're able to determine which digs would generate the most profitability and store a map of where to dig in the future, allowing you to prioritize your digging and allocate your time most efficiently.

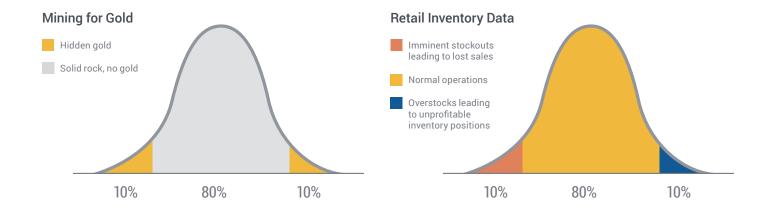
Needless to say, mining for gold would never be the same for you again.

Mining for gold in your Inventory

The ways in which retailers approach their inventory challenges and opportunities are similar to mining for gold. Retailers' data is bountiful in a different type of gold: inventory exceptions (outliers) that, if handled quickly, would have a positive impact on revenue. For example, the ability to take advantage of an unexpected sales trend and increasing inventory to support said trend as it erupts, therefore reducing stockouts. Or the aptitude to recognize certain merchandise is selling slower than anticipated and enacting a plan to ensure you aren't left with too much inventory at the end of the season, preventing markdowns.

However, the means of locating and extracting retail inventory gold manually is inefficient and doesn't yield the highest monetized value. The challenge today is identifying the biggest problems and opportunities, and then delivering your people a process to act on them.

Retailers employ talented and passionate people to drive their businesses, but in most cases, don't arm them with all necessary tools to make financially impactful decisions. Traditional retail systems, like today's mining methods, look at the big picture and attempt to find all gold by processing the whole ground. With these systems, there is no easy way to drill down to find the hidden gold in an accurate, predictable way. Even if you could somehow map the gold in your data with an incomplete tool set, it would take your team hours of exhaustive search through spreadsheets, and you'd still miss many exceptions and the causes behind them.



This white paper uncovers the true costs of inventory outliers, inventory distortion, and the inefficiencies of traditional systems retailers incorrectly assume are solving the problem. It also reveals an intelligent set of tools that, when used in conjunction with traditional systems, enhance the overall process of acting on potential retail problems and opportunities.

Inventory Distortion: What It's Really Costing You

Inventory distortion is an age-old inventory problem and challenge for retailers. Inventory distortion, comes in two forms: items that stockout in stores and items that are overstocked. For most retailers, 80 percent of your day-to-day merchandising and inventory execution can be managed by your existing systems, i.e., there are no big problems or big exceptions. But there are many factors in the consumer demand world that can change in an instant.

Human behavior and ever-changing trends are two unpredictable factors that can contribute to inventory distortion. What if a high-profile superstar started wearing a line of merchandise you carry-and your sales began to ramp up unexpectedly? Chances are your existing operational and business intelligence (BI) systems wouldn't recognize the opportunity until it was too late to take action, even though you might have lost millions in potential sales.

Weather is another example of an unpredictable factor that contributes to inventory distortion. Take, for example, a children's clothing retailer preparing for the summer season. Past data show your stores in the southeast U.S. sell more bathing suits and swimming accessories at this time of year, so you ship extra inventory to satisfy the anticipated demand. But just two weeks into the season, your regional stores are hit by an unprecedented amount of rainfall, and customers aren't shopping for swim trunks and beach towels—they want rain boots and ponchos. While your original plan was logical, its execution was foiled by the regional climate. What system do you use to help you react?

The real causes of inventory distortion go beyond unpredictable factors.

Three common operational errors also contribute to stockouts and overstocks:

Building retail plans based on last year's results

Say you stocked out of a popular product at one of your stores this year. If you base next year's plan on this year's unit sales, you will not plan for enough product to meet the store's demand next year. Essentially, you're punishing the store for performing better than anticipated. If you're not capturing that reality, and you give them the same amount of stock as last year, you'll never maximize your opportunity.

2 Disregarding assortment need by store or product type

It's not feasible to have a perfect service level in every store, but retailers should do everything they can to eradicate preventable stockouts and overstocks. For a retailer, simply getting the right merchandise in the right stores where people want to buy it and removing it from the wrong stores where people aren't buying it presents huge financial opportunity. Yet most retailers disregard individual store's assortment needs, instead providing the same products to every store.

3 Manually searching for problems and opportunities

In mid-season, corporate merchants search for problems and opportunities manually, or they react to store managers' pleas for more or different inventory. These methods of identifying problems are often ineffective because they may not always find the highest value problem or opportunity.

Don't mine blindly

When data that can drive profits goes unobserved, gaps in execution result, and the bottom line suffers.

Overall customer satisfaction—the backbone of retail—is also negatively impacted. If a customer shows up looking for an item not in stock, she is disappointed in your business and likely to go to a competitor, which means she may not return—and tell other people not to bother going to your store. The residual effects of regular stockouts limit customer satisfaction and loyalty.

Traditional Technology Just Doesn't Get It

Of course, you're not falling victim to inventory distortion, are you? After all, you've invested a great deal of money in systems that do a daily deep-dive on demand prediction, inventory allocation, reporting and more. You keep an eye on the trends, and overall performance seems to be meeting your goals.

Unfortunately, you're probably still missing the most valuable nuggets of data. A lot of business intelligence and reporting tools just tell you the news, and traditional operational systems only focus on managing what's routine. They don't scour through every store/SKU combination, tag every overstock instance, rank them from a monetized perspective, and tell you where you can take action to prevent margin-eroding markdowns.

One of the biggest limitations of traditional retail systems is the lack of actionable insight. Data without insight and associated action is meaningless. Traditional business intelligence systems, for instance, really just automate the display of data, making it look sexy but offering little insight, resulting in more spreadsheet-like numbers and fewer informed actions.

What else do most traditional retail systems miss?

Missing History of Stockouts:

Many organizations have some level of stockout reporting, but all they really include is what is stocked out today-completely ignoring how many times the stockout occured over the last month, what the lost sales impact was, and what will become stocked out tomorrow or a week from now. Only if your systems can examine a history of stockouts can you truly understand the specific changes you need to make to your business for your inventory to meet demand now and in the future.

Overlooked Customer Perspective:

Success in retail is made or broken based on how you serve your customers. But because inventory is most often managed at the highest levels, the details about how your customers interact with individual stores and their merchandise are often overlooked.

Severe Opportunity Cost:

Retailers often spend more of their time gathering and formatting data in Excel spreadsheets and performing data manipulation than they spend actually analyzing it to make it efficient. Looking at low-level data is inactionable, while data aggregation hides the real opportunity.

Inability to Identify Outliers:

Many retailers do not have systems that look for the worst cases of inventory distortion in their businesses; therefore, they are not able to take effective action on them when they arise. Unrecognized stockouts and overstocks contribute heavily to this.

Traditional operational and business intelligence systems are excellent for reporting overall performance and trends for well-established key performance indicators, but they are poor at handling retail exceptions when they arise.

The bottom line is this: The systems you think are solving inventory productivity challenges are missing fixable and high value opportunities due to inventory distortion. For large retailers, that could mean millions of dollars in gross margin benefit per year.

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11 PINNACLE		1443*		111.75	219.95	425.14	Ai	W 2BIN MAC	BEU	-1	-13.3	3 -	7	0	0.0	0	0	0.0	0
12		BLK/GRY	STRP		113.13	FR 02/	09/9	98 LM 06/0	2/13	8				8			8		
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26 PINNACLE		*1201		116.14				ENACHE DB			6.	.1	17	3	9.8	11		7.1	15
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28																			
29 PINNACLE		*3421		116.14				ENACHE DB			5 3.	.7	28		5.2	20		10.6	10
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Intelligently Mining for Retail Outlier Gold

While your go-to system may be identifying many profit opportunities and giving you an overview of inventory wellness, it's probably missing a significant percentage of inventory outliers and, therefore, lost opportunities, which equates to lost revenue. But what if you could mine for inventory outliers (and the gold they lead to) smarter and more efficiently? What if you, like the gold miner, acquired an innovative scanning tool that mapped outliers and presented strategic plans for extracting inventory gold, improving your overall process and increasing your returns?

Aptos Analytics Playbooks™ are the gold-seeking tools you're missing. They give retail professionals the ability to make enhanced decisions.

For example, using an inventory outlier metric called 'Imminent Stockouts,' Playbooks show you the instances of stockouts that are going to occur unless corrective action is taken. Rolled up effectively to any reporting level and combined with value metrics like 'Imminent Lost Sales Dollars,' Imminent Stockouts help you better understand the dollar severity of running out of inventory.

Playbooks can make an immense difference in your team's performance. Not only can Playbooks allow your team to focus its efforts on solving the highest dollar value opportunities, but by eliminating the need to manually dig for data, Playbooks can improve your team's efficiency, too. That's time your people can spend negotiating with vendors, buying better assortments, working with store operations personnel, and more.

Aptos Analytics Playbooks Help Recover Lost Sales

	# Immin. Stock	Immin. Lost	Service				Inv @Retl
Dept	Outs	Sales	Level	Sales	Sales %Tot	Inv @Retl	%Tot
Total	9,477	\$2,130,493	69%	\$5,122,388	100.0%	\$68,112,566	100.0%
0052:Hndbgs / Lugg	1,972	\$690,825	72%	\$1,436,189	28.0%	\$17,266,348	25.3%
0028:Wmns Csl OtrWr	1,382	\$345,201	72%	\$1,144,617	22.3%	\$14,600,130	21.4%
0045:Wmns Clssic	1,013	\$195,887	54%	\$577,195	11.3%	\$5,907,016	8.7%
0030:Wmns Lnd Rain	300	\$109,584	74%	\$386,156	7.5%	\$8,433,181	12.4%
0038:Wmns Swtrs	1,839	\$263,888	59%	\$378,250	7.4%	\$3,134,682	4.6%
0048:Scarves	1,327	\$180,997	70%	\$377,541	7.4%	\$7,259,275	10.7%
0029:Wmns UnInd Rain	475	\$159,094	69%	\$347,753	6.8%	\$7,247,987	10.6%
0058:Smll Lthr Gds	1,112	\$162,010	83%	\$347,177	6.8%	\$3,509,013	5.2%
0027:Wmns Lthrs/Sds	57	\$23,006	60%	\$127,510	2.5%	\$754,935	1.1%

Identify upcoming stockouts and their potential dollar impact. Then, take action to enable sales that would have otherwise been lost.

Discover for yourself if Aptos Analytics Playbooks really are worth their weight in gold. Learn more today at info@aptos.com or www.aptos.com.

About Aptos

Aptos: Engaging Customers Differently

In an era of virtually limitless choice, sustained competitive advantage only comes to retailers who engage customers differently-by truly understanding who they are, what they want and why they buy. At Aptos, we too, believe that engaging customers differently is critical to our success. We are committed to a deep understanding of each of our clients, to fulfilling their needs with the retail industry's most comprehensive omni-channel solutions, and to fostering longterm relationships built on tangible value and trust. More than 500 retail brands rely upon our Singular Commerce platform to deliver every shopper a personalized, empowered and seamless experience... no matter when, where or how they shop.

Learn More

Aptos maintains offices in Atlanta GA, Columbus OH, Monterrey MX, Montreal QC, and Newburgh NY. More information on Aptos is available at: info@aptos.com and www.aptos.com.



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