

# TOC for Distribution: Beyond Consumer Products Retail

Stone Hsu, Goldratt Consulting  
Goldratt Consulting

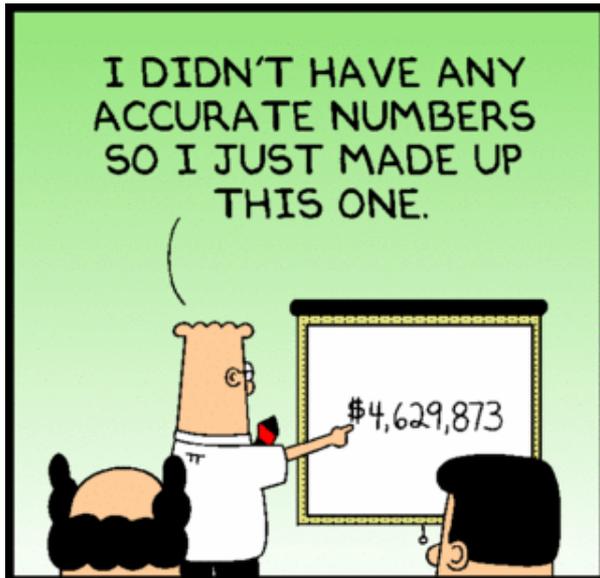
September 7-8, 2017



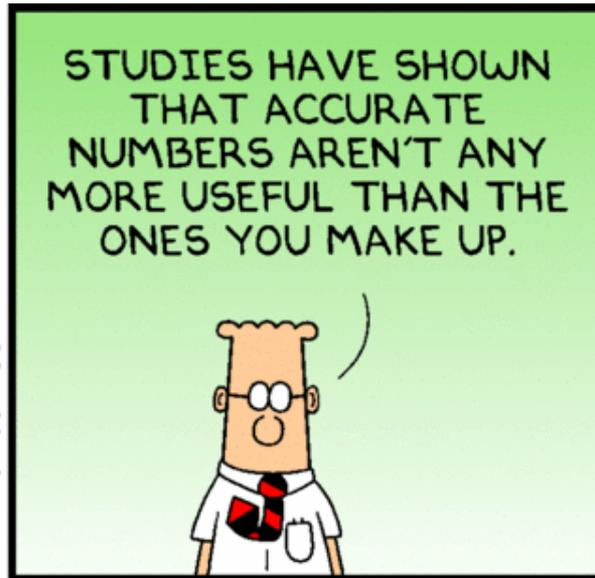
*PRESENT:* BUILDING ON SUCCESS 2017

**BREAKTHROUGH RESULTS  
FOR GOVERNMENT AND  
BUSINESS**

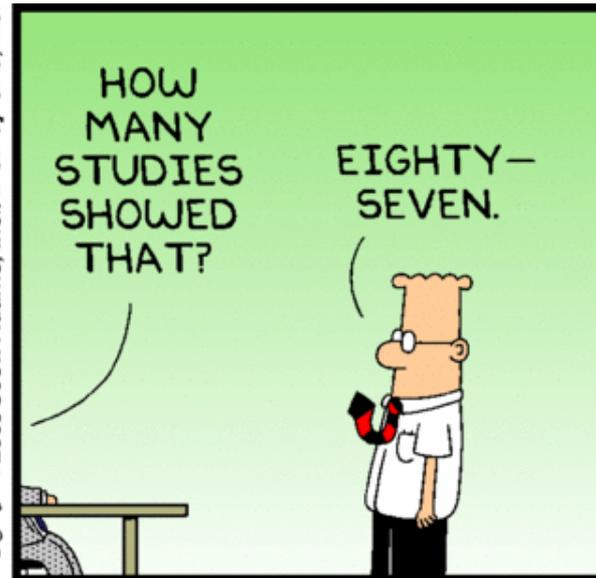
# Dilbert on forecasts:



www.dilbert.com scottadams@aol.com

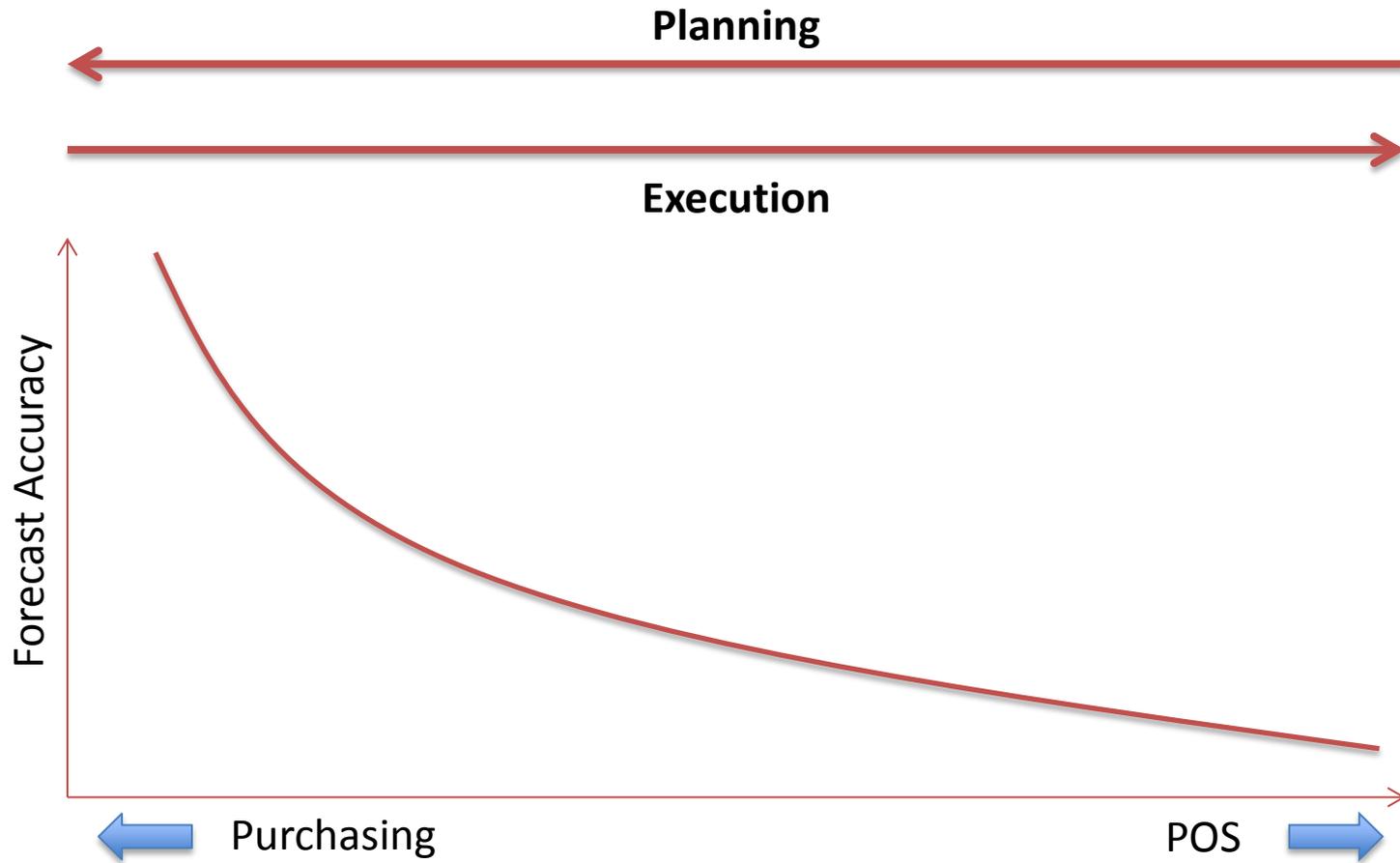


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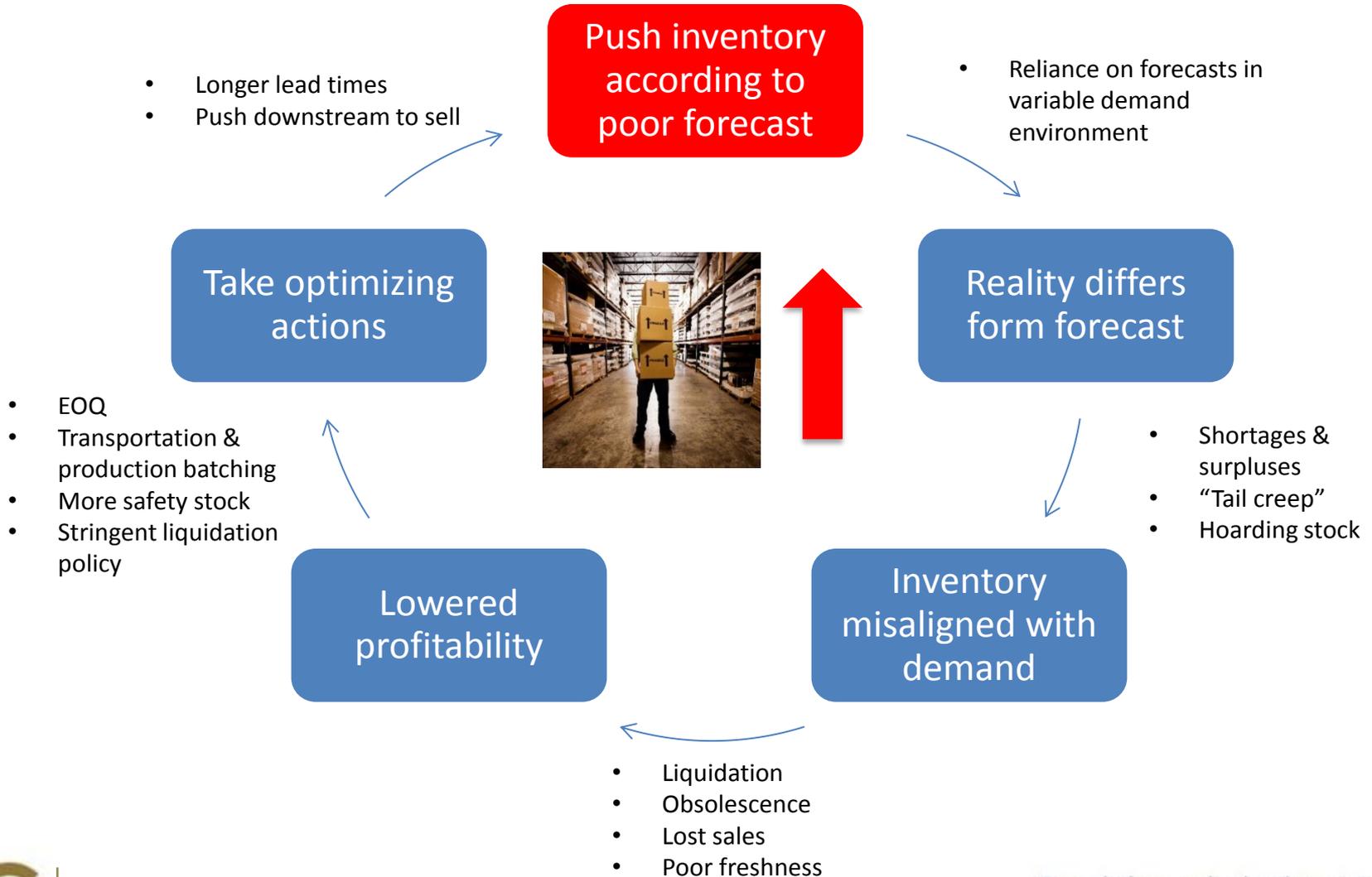


# Demand Planning

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# Undesirable Effects



# Distribution Solution

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## The Power of Aggregation

- Keep most of the inventory in centralized warehouses
- Lower inventory, better allocation

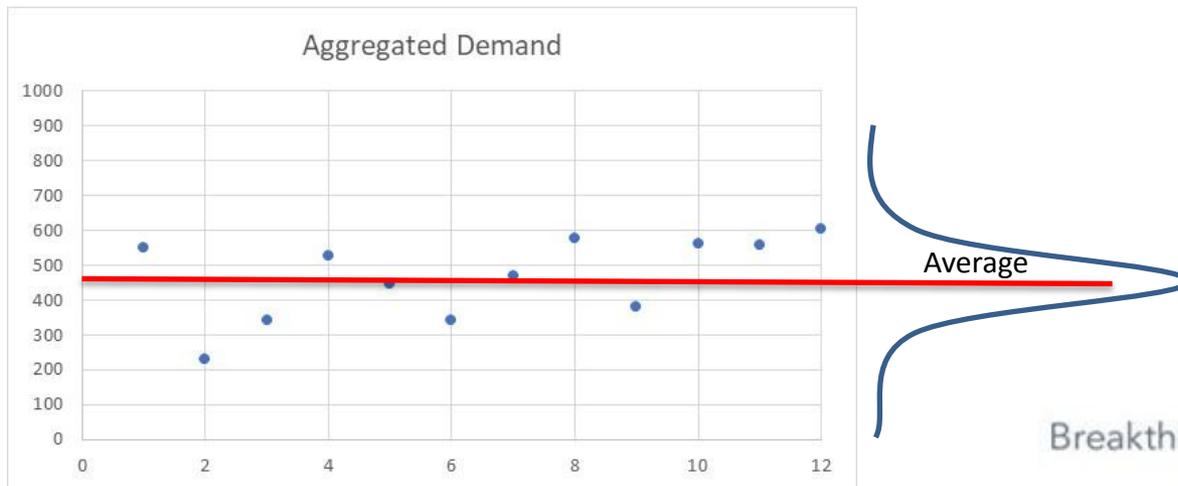
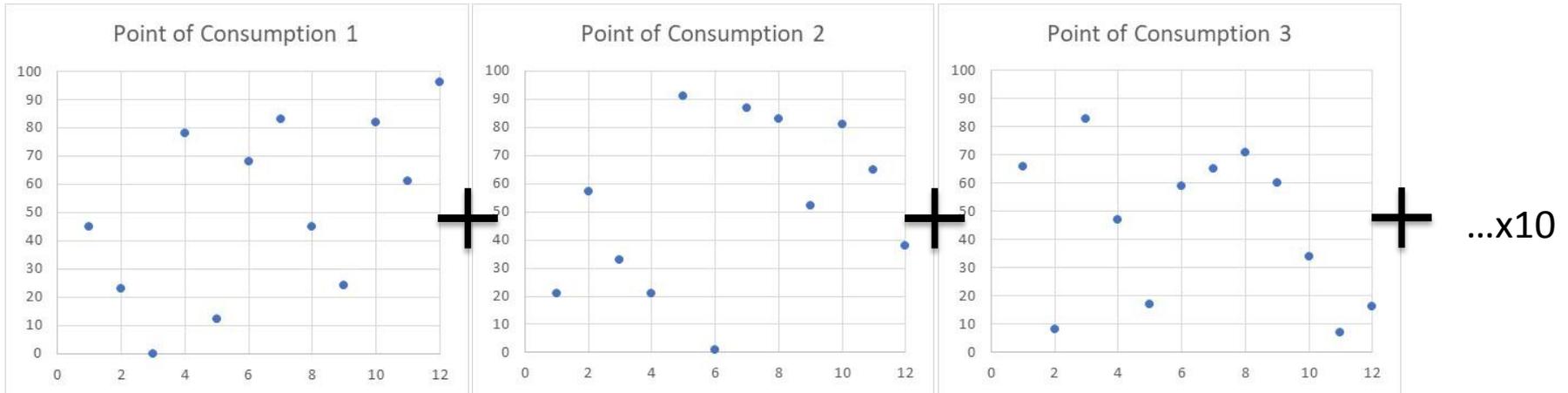
## Minimize Lead Time

- Debatch and perform more frequent replenishment based on actual consumption
- Lower inventory, lower obsolescence

## Manage to Buffers

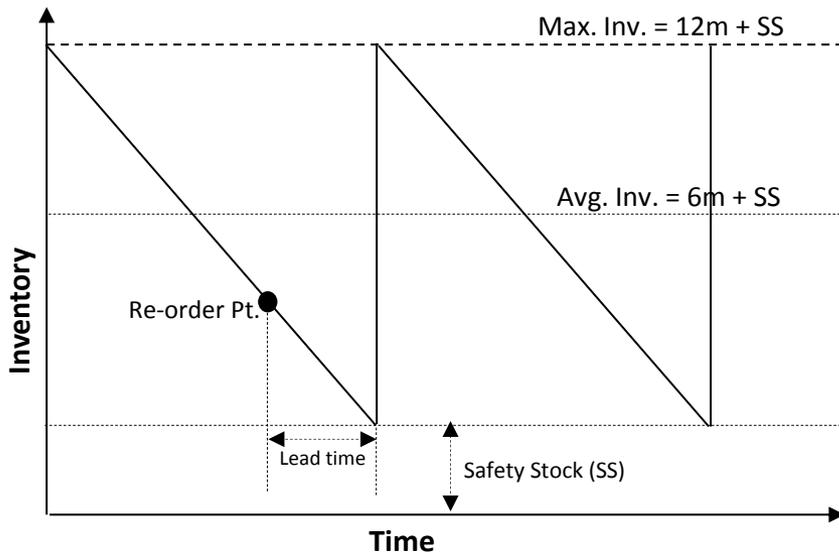
- Use dynamic buffers to manage product “depth”
- Lower inventory, better availability

# The Power of Aggregation

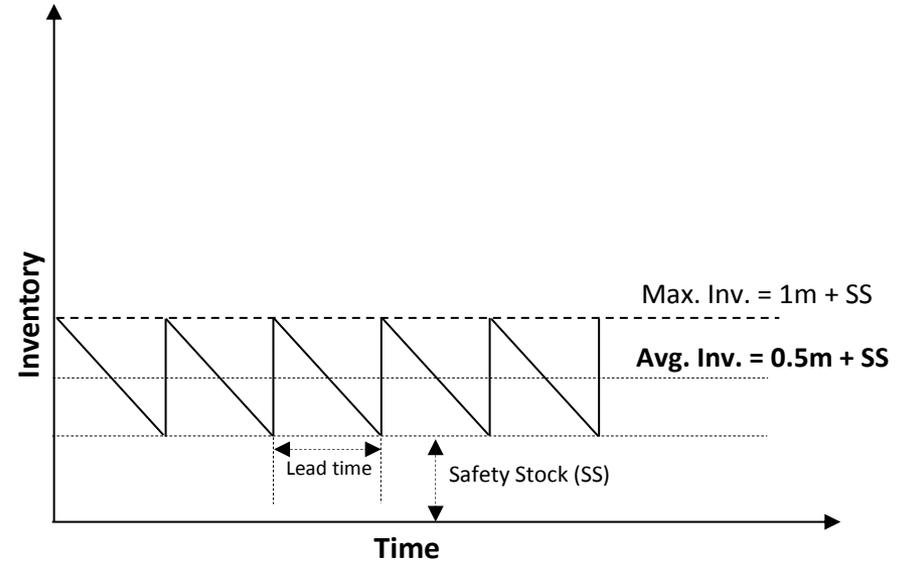


# Frequent Replenishments

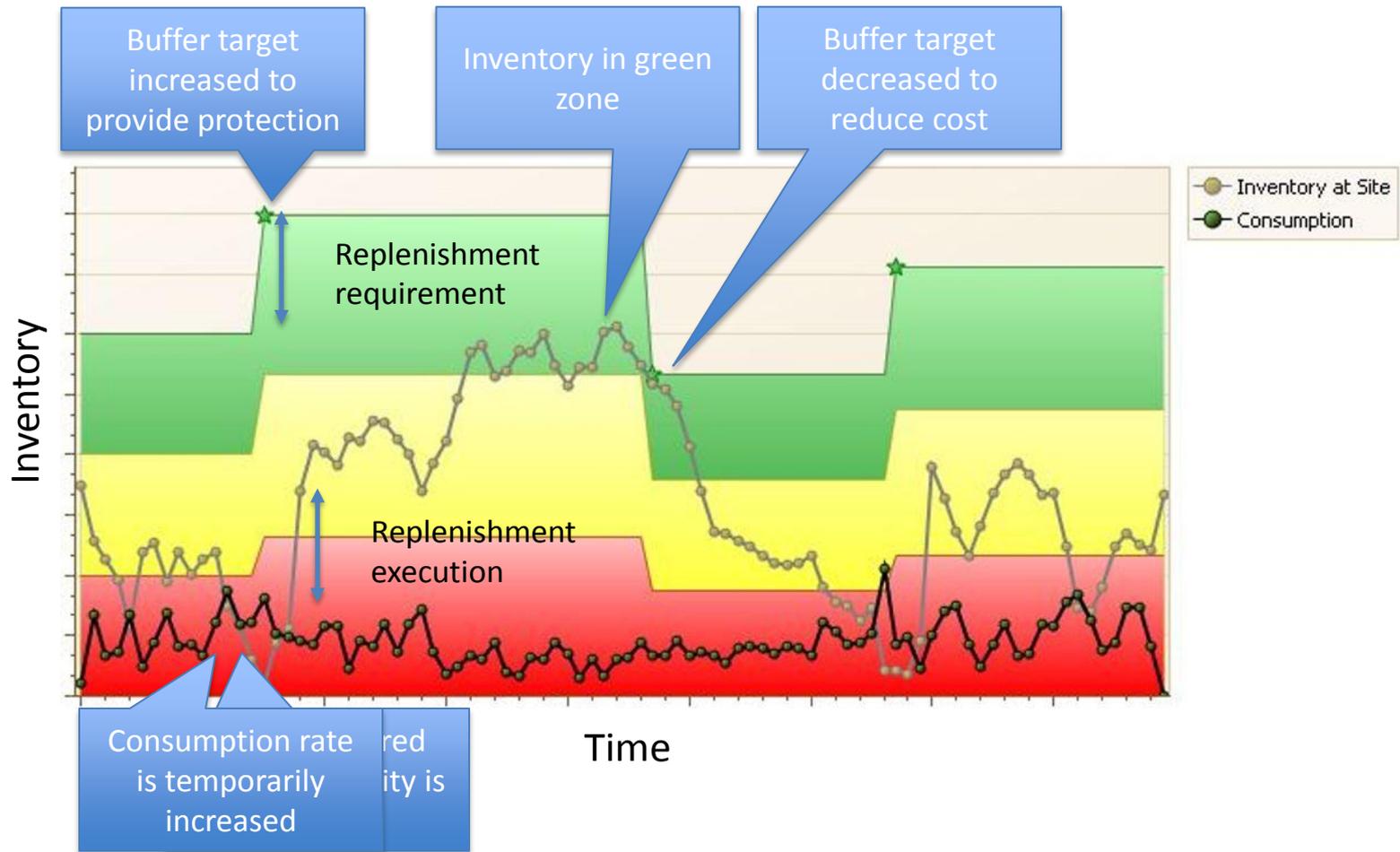
Ordering yearly



Ordering Monthly



# Dynamic Buffer Management



# Retail Solution

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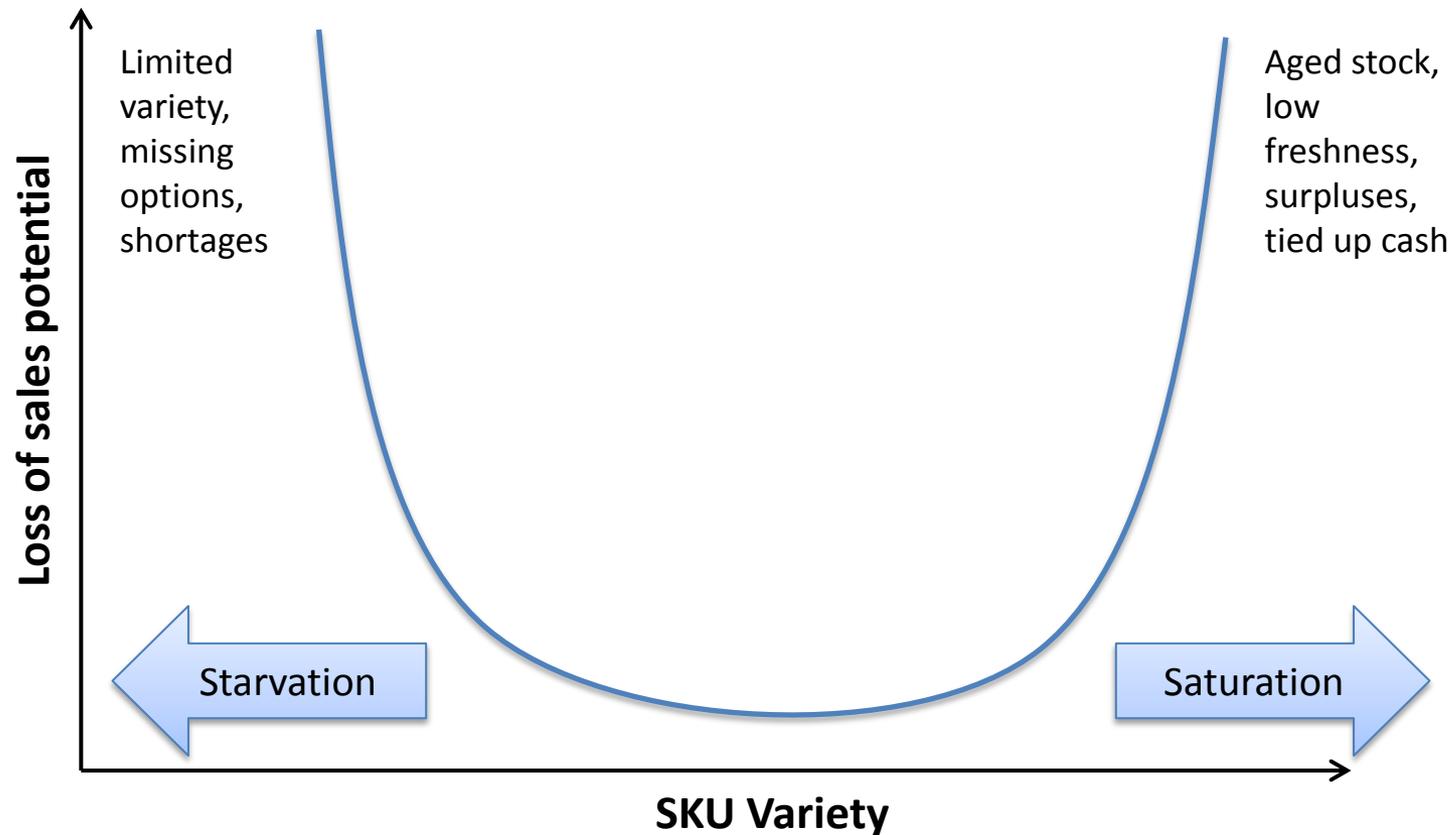
## Carry the Right Stuff

- Align the product mix to what the customers are buying
- Increase categories with more potential to improve sales
- Decrease categories performing poorly to lower inventory, free up shelf space, release capital

## Manage the Lifecycle

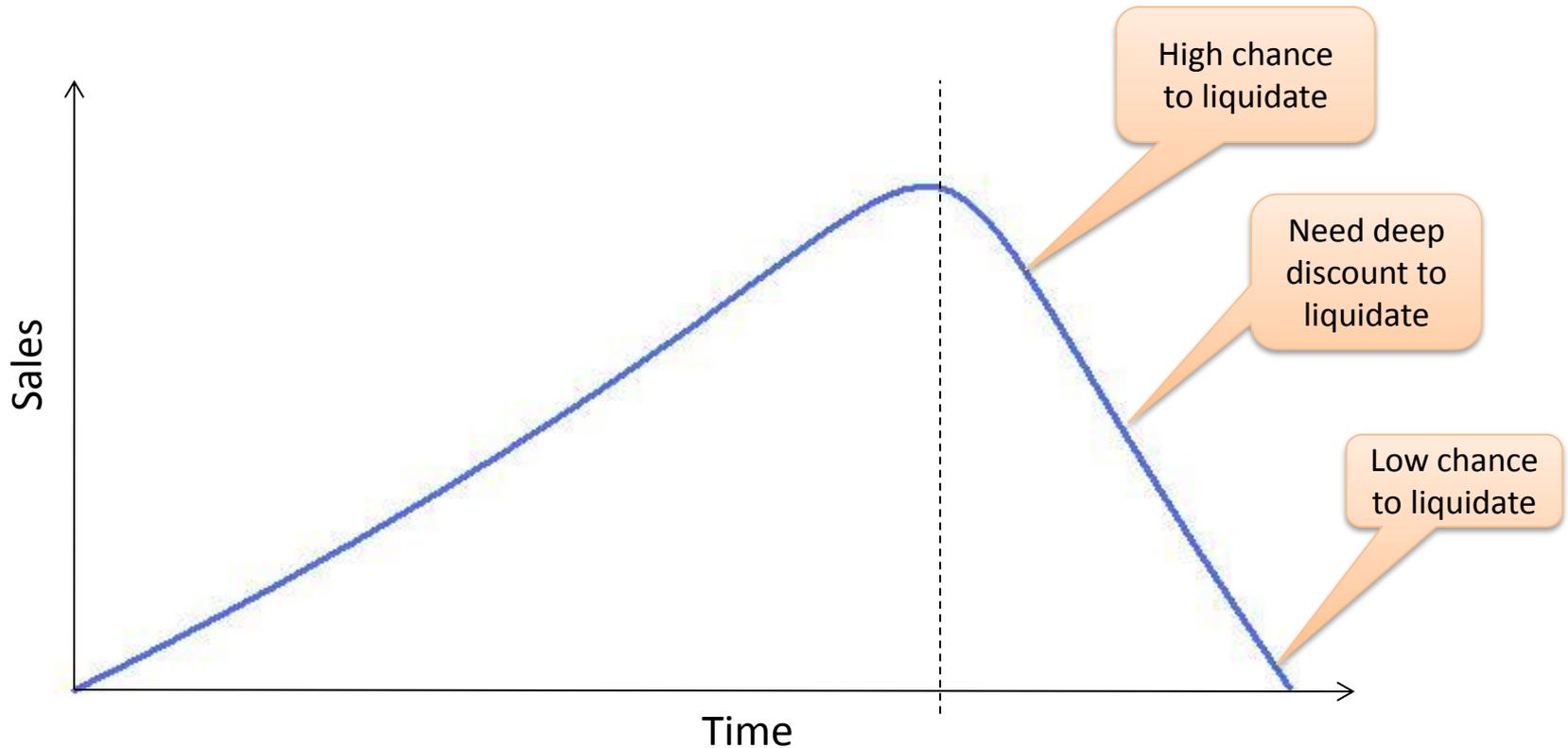
- Liquidate slow-movers to make room for new products
- Increase “freshness” and draw customers

# Category Variety Management

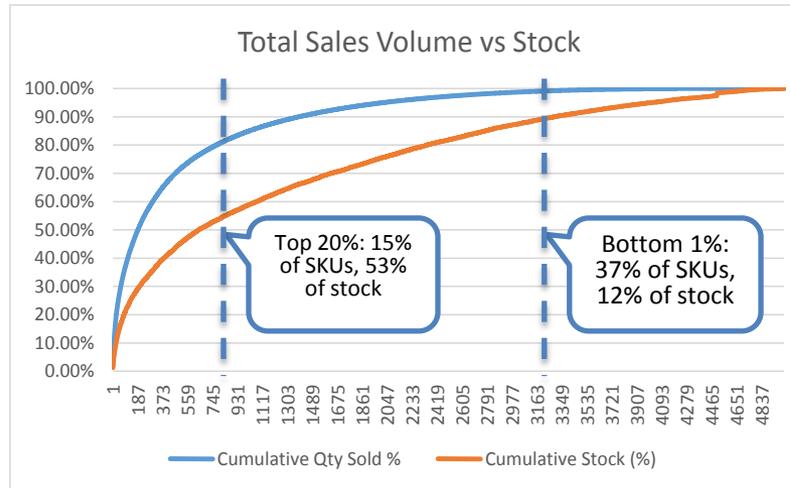


To remain in the flat part of the U-curve, carry more variety in product categories that are selling, and vice versa!

# Liquidate Low Performers

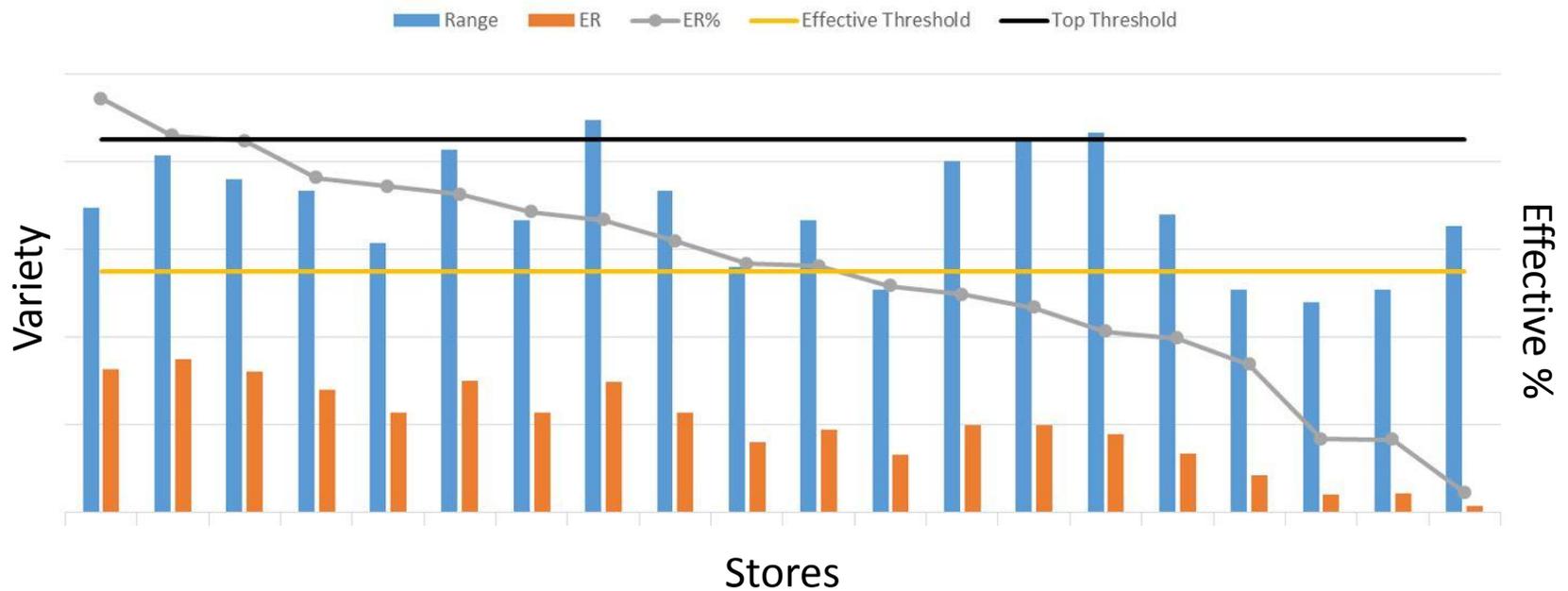


# Case Study – DABC



Class	Universe Variety	Universe				Store 29				Store 37				Store 15				Store 4			
		Total		Bottom 1%		Total		Bottom 1%		Total		Bottom 1%		Total		Bottom 1%					
		SKUs	% Variety	SKUs	% Stock	SKUs	% Variety	SKUs	% Stock	SKUs	% Variety	SKUs	% Stock	SKUs	% Variety	SKUs	% Stock				
KKB	291	250	98	39%	22%	184	46	25%	12%	240	79	33%	23%	75	12	16%	17%				
KKD	111	96	39	41%	27%	72	11	15%	9%	96	30	31%	24%	15	2	13%	22%				
KKH	72	70	20	29%	16%	57	8	14%	7%	68	13	19%	11%	19	2	11%	7%				
KKR	45	41	13	32%	25%	25	3	12%	16%	40	7	18%	14%	11	2	18%	16%				
KKT	20	20	3	15%	13%	17	2	12%	11%	20	5	25%	13%	5	1	20%	22%				
PLB	330	249	101	41%	22%	174	46	26%	15%	237	85	36%	18%	50	9	18%	16%				
PLF	123	113	35	31%	25%	76	19	25%	16%	111	38	34%	24%	39	7	18%	23%				
PLH	122	95	38	40%	36%	47	10	21%	11%	81	25	31%	20%	10	1	10%	10%				
PLR	268	193	83	43%	27%	113	26	23%	12%	183	74	40%	28%	16	3	19%	8%				
PRY	86	73	33	45%	35%	34	5	15%	10%	71	28	39%	31%	11	2	18%	23%				

# Case Study - DABC



# Case Study – DABC

## ■ Results

Store	Action	Result
Pilot 1	Pulled 7% of SKUs Allocated 12.5% of SKUs	August sales growing at 4.7% week over week, compared to 1.2% for non-pilot stores
Pilot 2	Pulled 23% of SKUs Reduced inventory by 5%	No change in sales while inventory has decreased
		Provide key feedback to purchasing team on products to bring in

- Roll out to all stores planned for 2018, along with distribution elements
- Simulations based on historical data indicate it is possible to
  - Reduce inventory by ~15%
  - Reduce stock out days by ~10%
  - Requires an investment in warehouse operations/staffing

# What If I Don't Sell to Consumers?

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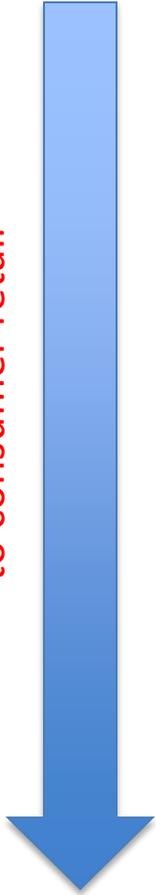
Whenever...

- There is a demand for something
- That demand is difficult to predict perfectly
- There is lead time to meet that demand

...you have a supply chain!

# 3 Environments

Increasing level of similarities  
to consumer retail



- Project Engineers



- Fleet of trucks



- IT Equipment



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THANK YOU!