

# ***Retail the TOC way***

## ***Introduction***

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# The Retail Paradox

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- ***Stores are packed with inventory, yet there is continuous pressure for more products***

# The Fundamental Challenge

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- ***We want to have:***
  - ***The right inventory***
  - ***At the right time***
  - ***In the right place***
  
- ***But in reality we have too much of the wrong inventory***

## Why?

# The 1<sup>st</sup> Element: Our Bias

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- *You can't sell what you don't have*
- *To protect sales we prefer to error on the safe side and have safety stock*
- *Simple formula: Complete Product Width X Safe Product Depth = too much inventory*

# Example: Over-Depth (Apparel)

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- **When filling up a store every style come in a set of sizes (1x38, 2x40, 2x42, 1x44)**
- **Minimum initial store fill 2 sets per style**
- **But...**
  - **Best sellers are selling at an average rate of 1 piece per week**
  - **However, most SKUs (Style & Size) do not sell even at a rate of 1 piece a month**
  - **A non negligible chunk does not get to sell until the EOSS**

# Example: Over-Width (Sport Retail)

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- *Just look at the speed at which we increase our range offering over the years...*

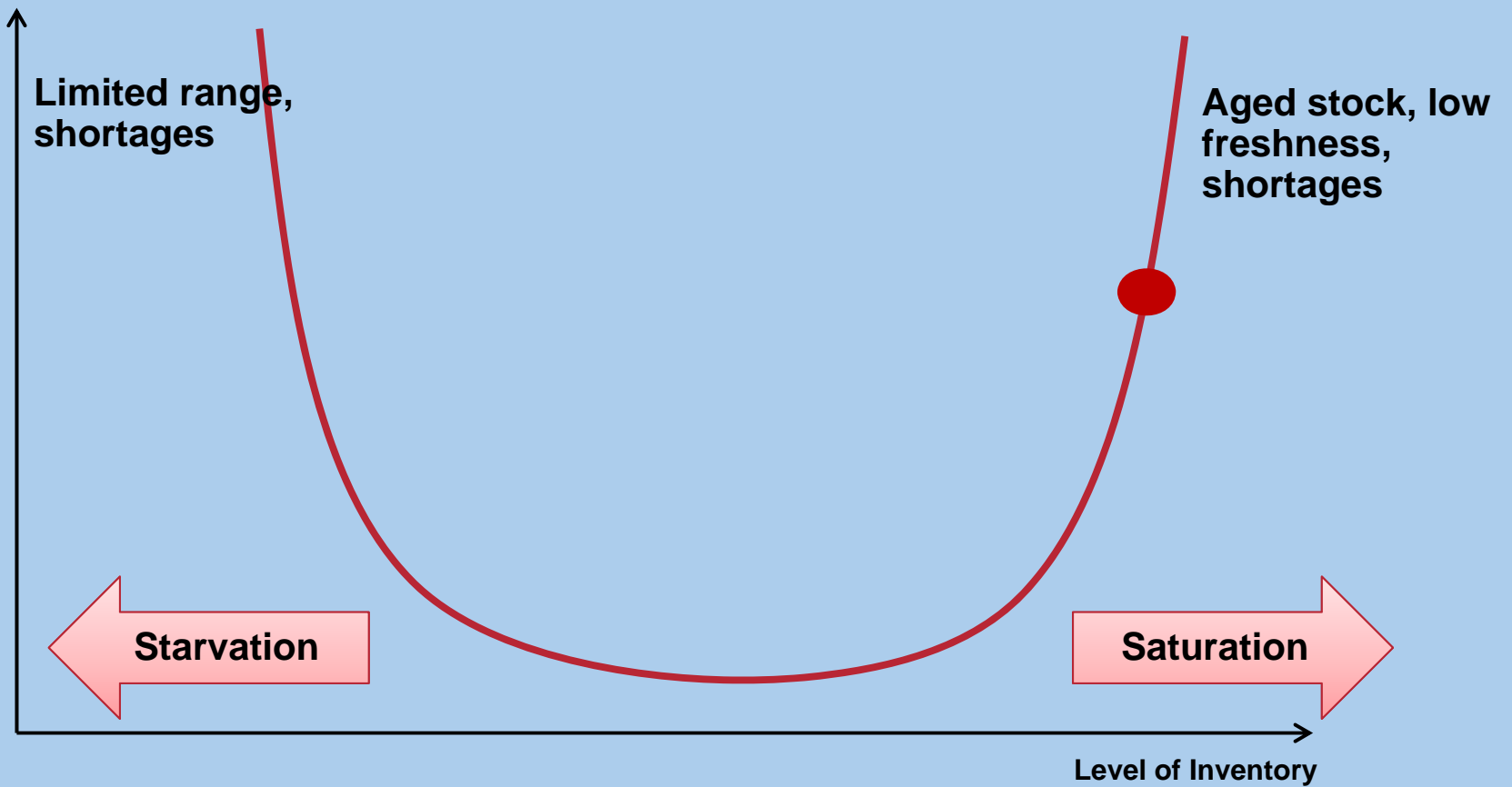
	2009	2010	2011	2012
Actual Range	11K	14.5K	17.7K	22.9K

- *The range is becoming far larger than the store's ability to represent and sell*

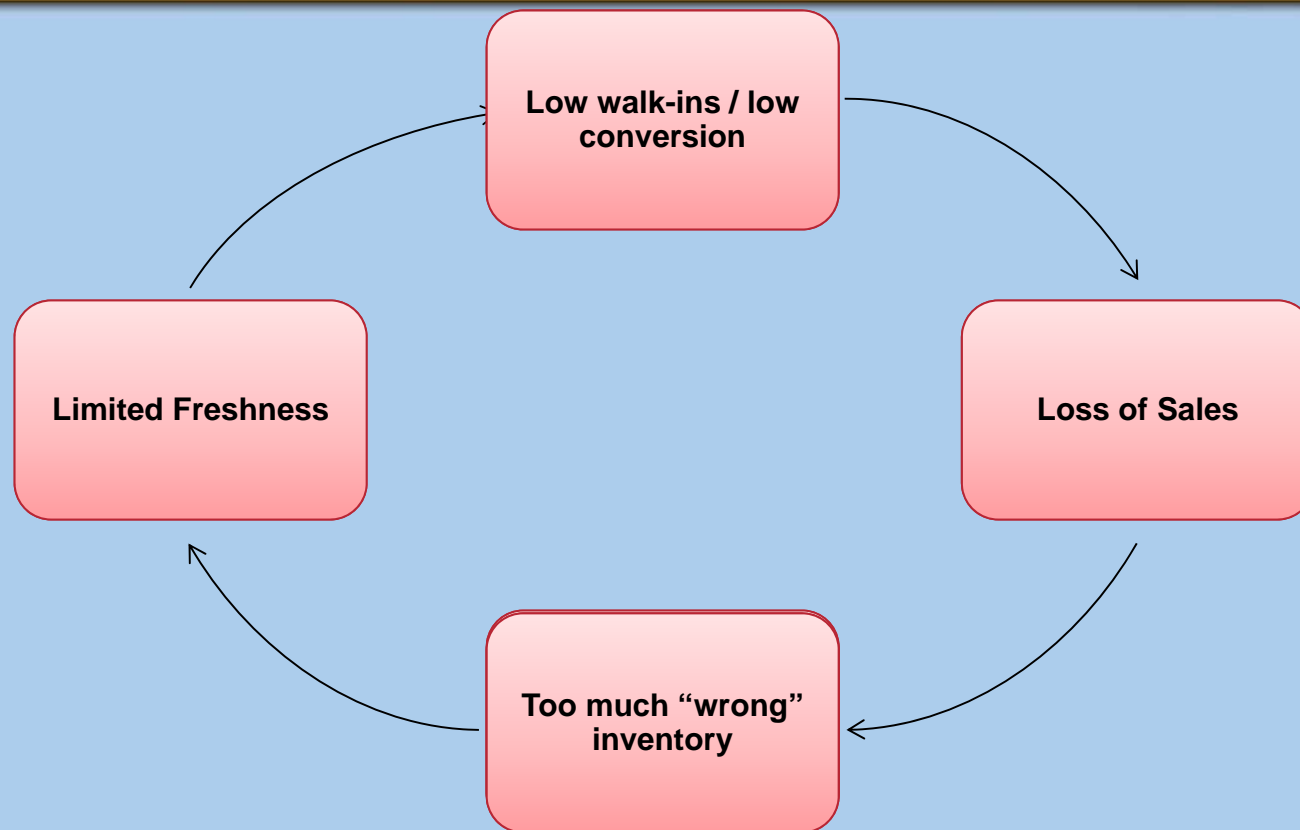
# Our Bias *(You can't sell what you don't have)*

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Loss of sales potential



# The Vicious Cycle



**Our safety works against us!**



# The Fundamental Challenge

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- ***But in reality we have too much of the wrong inventory and too little from the right inventory***

## Why?

# The 2<sup>nd</sup> Element: Lack of Synchronization

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- ***Lack of synchronization is a major contributor to our inability to have the right inventory***

# Different Functions - Different Needs

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- *There is a need to maintain high product availability (Supply Chain)*
- *There is a need to introduce new products/collections (Merchandising, Design)*
- *There is a need to get rid of aged stock (Retail)*
- *There is a need to broaden our product/category range (Merchandising)*

**Our processes are not synchronized towards the global optima**

# Example: NPI Synchronization (Jewelry)

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	# of SKUs
Typical Store Range	5000
Yearly NPI Product scope	10000

## ➤ Consider the following:

- *30% of the stock takes more than 6M to sell*
- *30% of the stock are best seller products*

## ➤ *What do we expect the new products to substitute? A best seller or a non-mover?*

## ➤ *What are the ramifications on the category level?*

# The Fundamental Challenge

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## Why?

# The 3<sup>rd</sup> Element: Managing Inventory Using Forecast

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- ***We buy, produce and allocate inventory based on forecast***
- ***Forecasts are never accurate***
- ***The longer our lead time the poorer the forecast accuracy***

# Forecast (Garment Fashion Example)

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- **Cycle time (concept to garments): 9-13M**
- **Season time: 6M**
- **Forecast method: Forecast the entire SKU range and depth 9-13M before season starts**
- **Performance:**
  - **85%-90% alignment to forecast, but...**
  - **50% shortages of the best sellers 2 months into the season**
  - **50% of sales are at full fare price, 30% on (50% off...) discount**
  - **20% returns post season**

# The Bottom Line

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- ***Unsatisfactory financial performance (Sales, Margins, Inventory turns, ROI)***
- ***Conflicts and tension between the key functions: Brand – Merchandising – Supply Chain - Retail***



# Back to the Fundamental Challenge

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- ***We want to have:***
  - ***The right inventory***
  - ***At the right time***
  - ***In the right place***

## How?

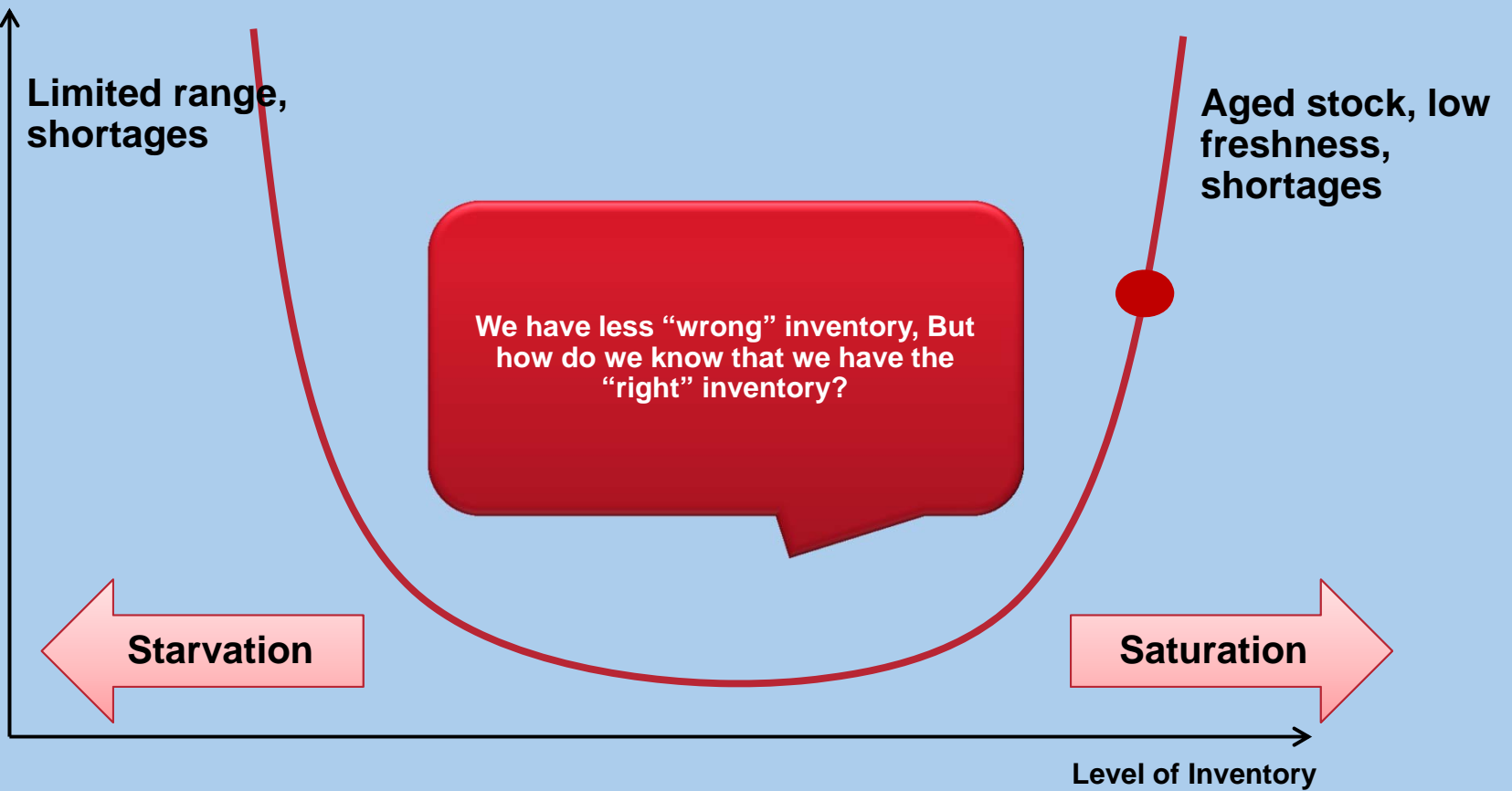
**Step 1**

# PREVENT SATURATION

# Step 1: Prevent Saturation

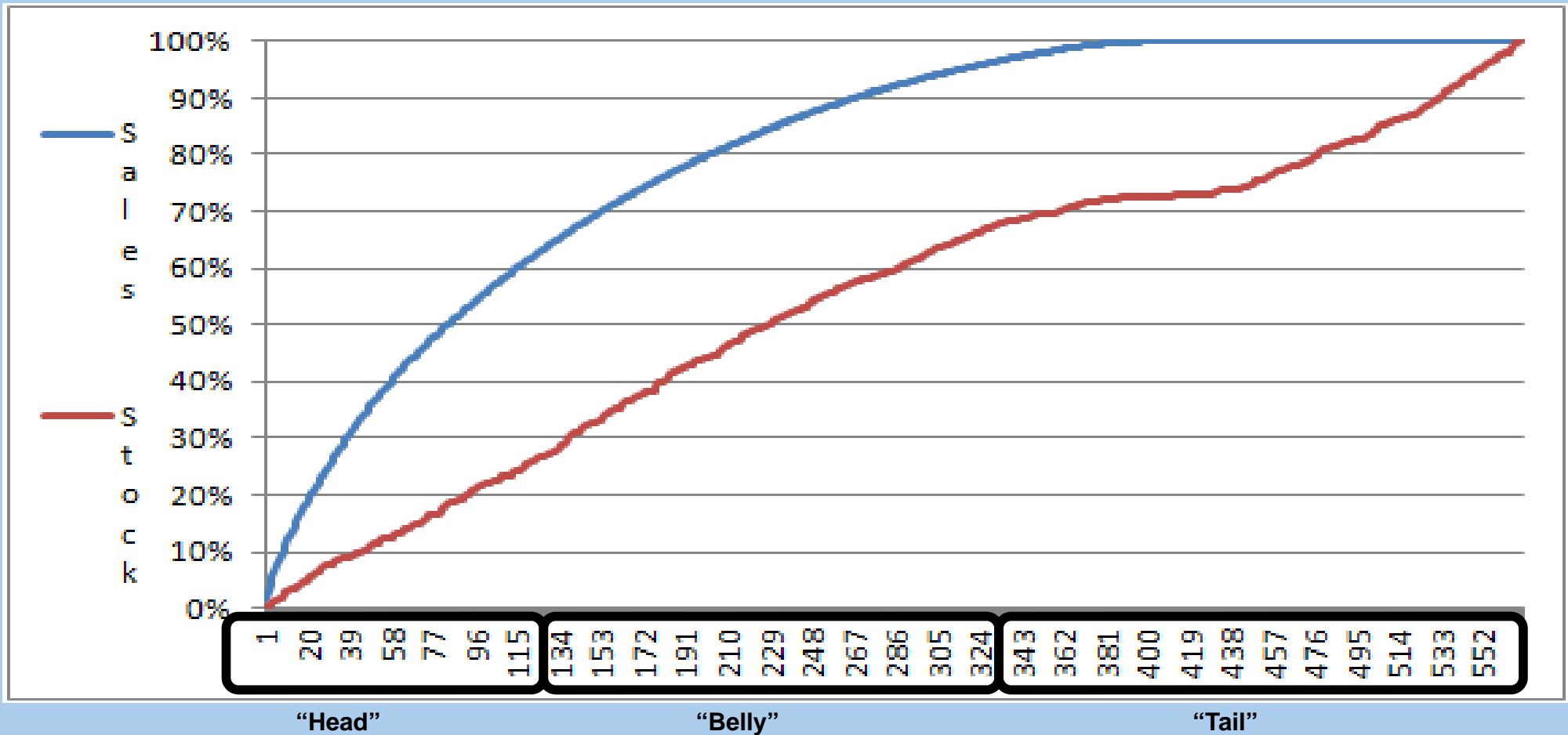
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Loss of sales potential



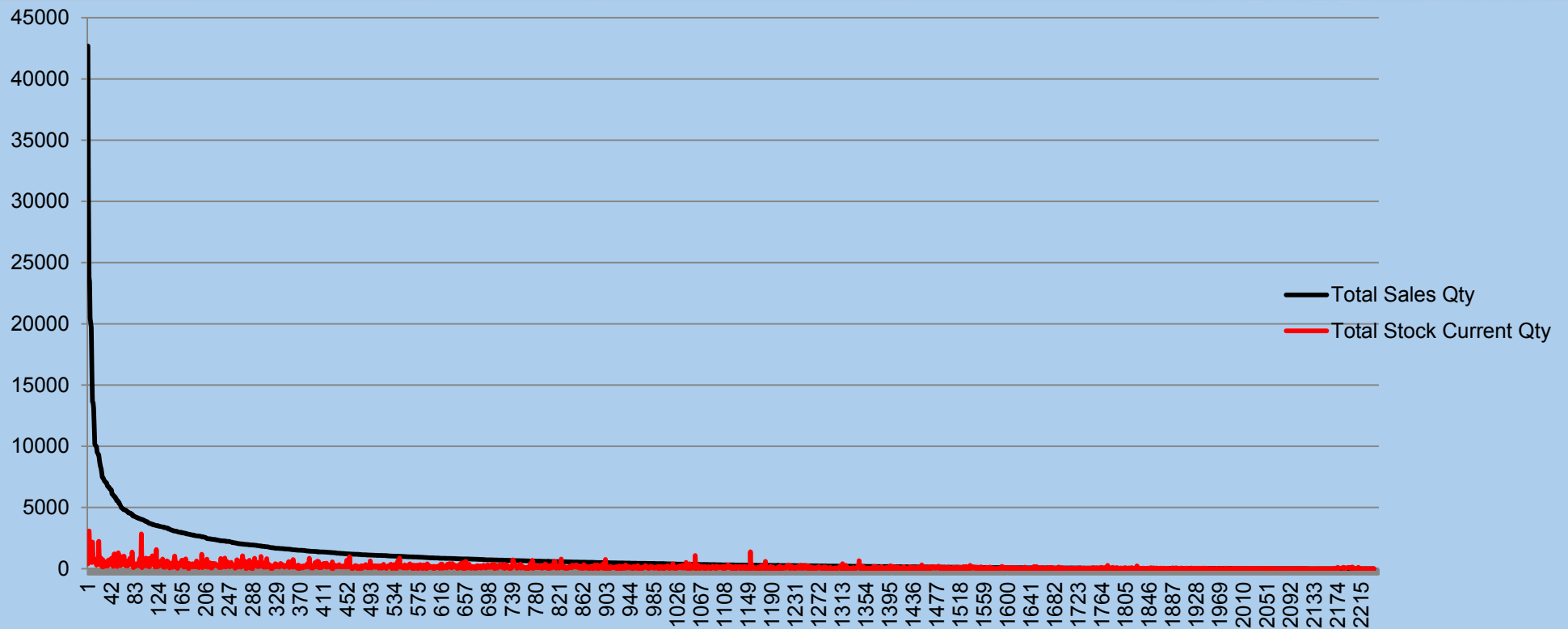
# Not All Products are Equal

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# Example (Consumer Electronics)

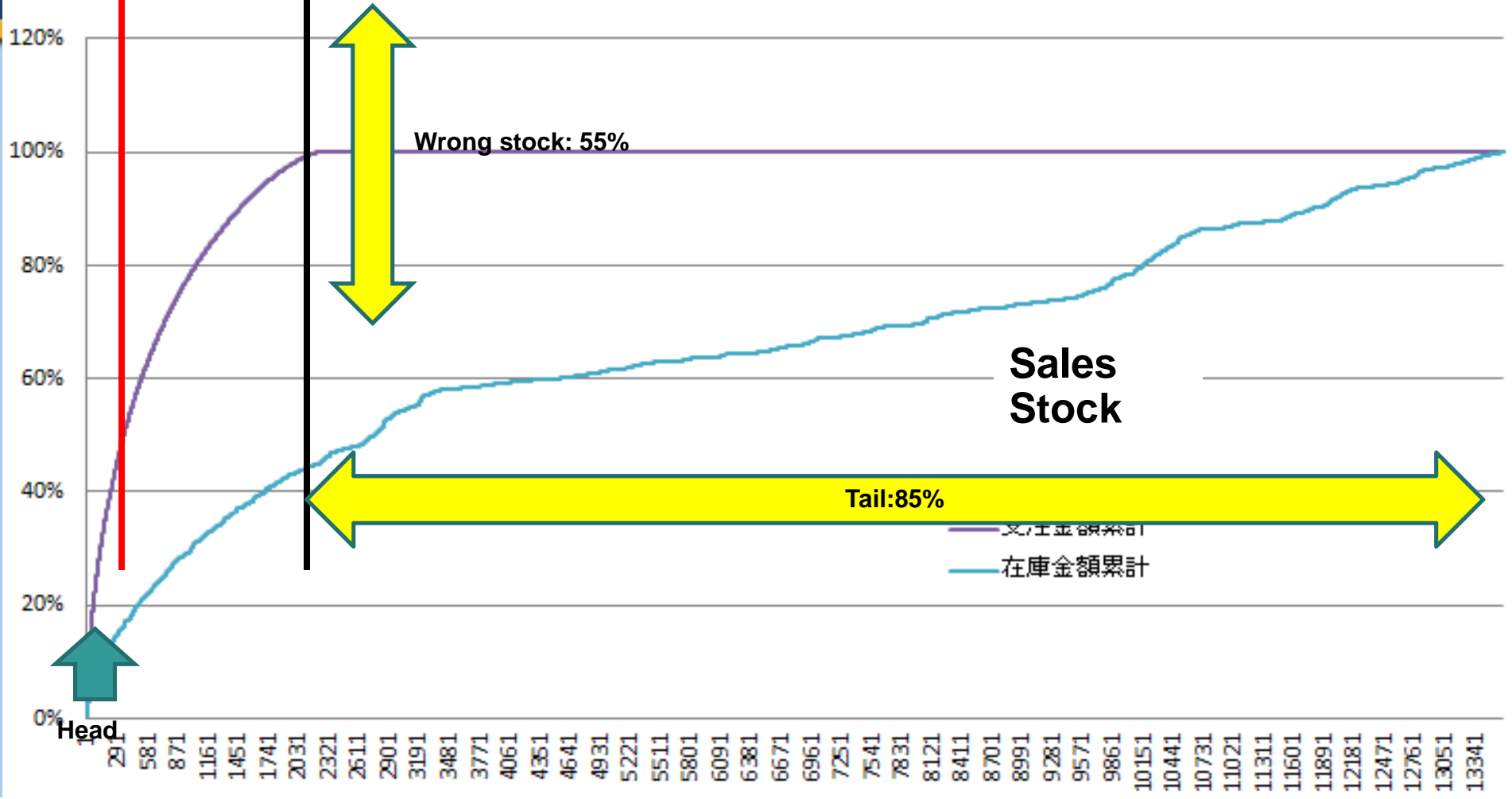
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**What is the likely outcome if we treat all products as if they are the same?**

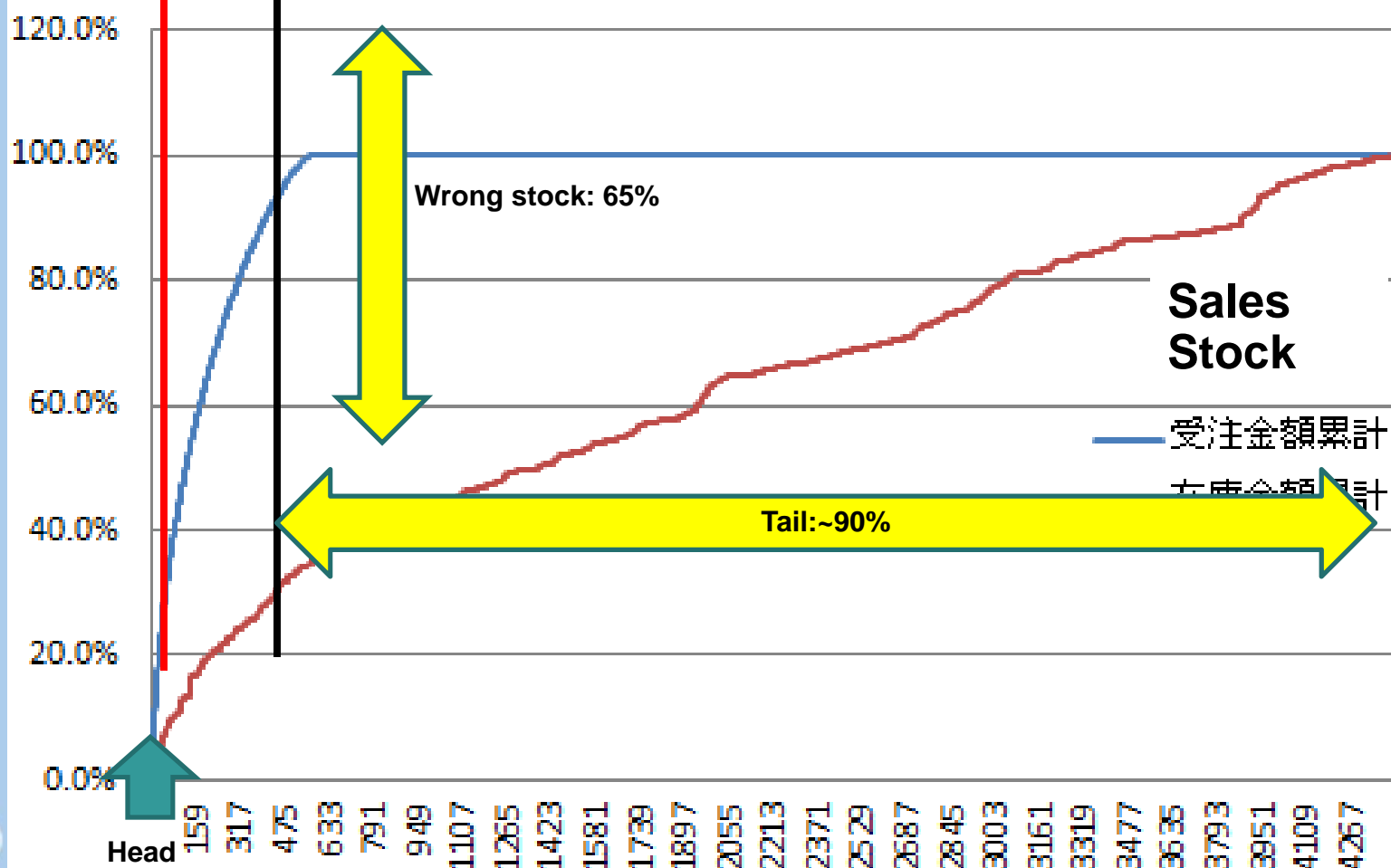
Apparel, The most selling category: Ladies, L-heavy apparel 1

APT0P1レディースL重衣料1



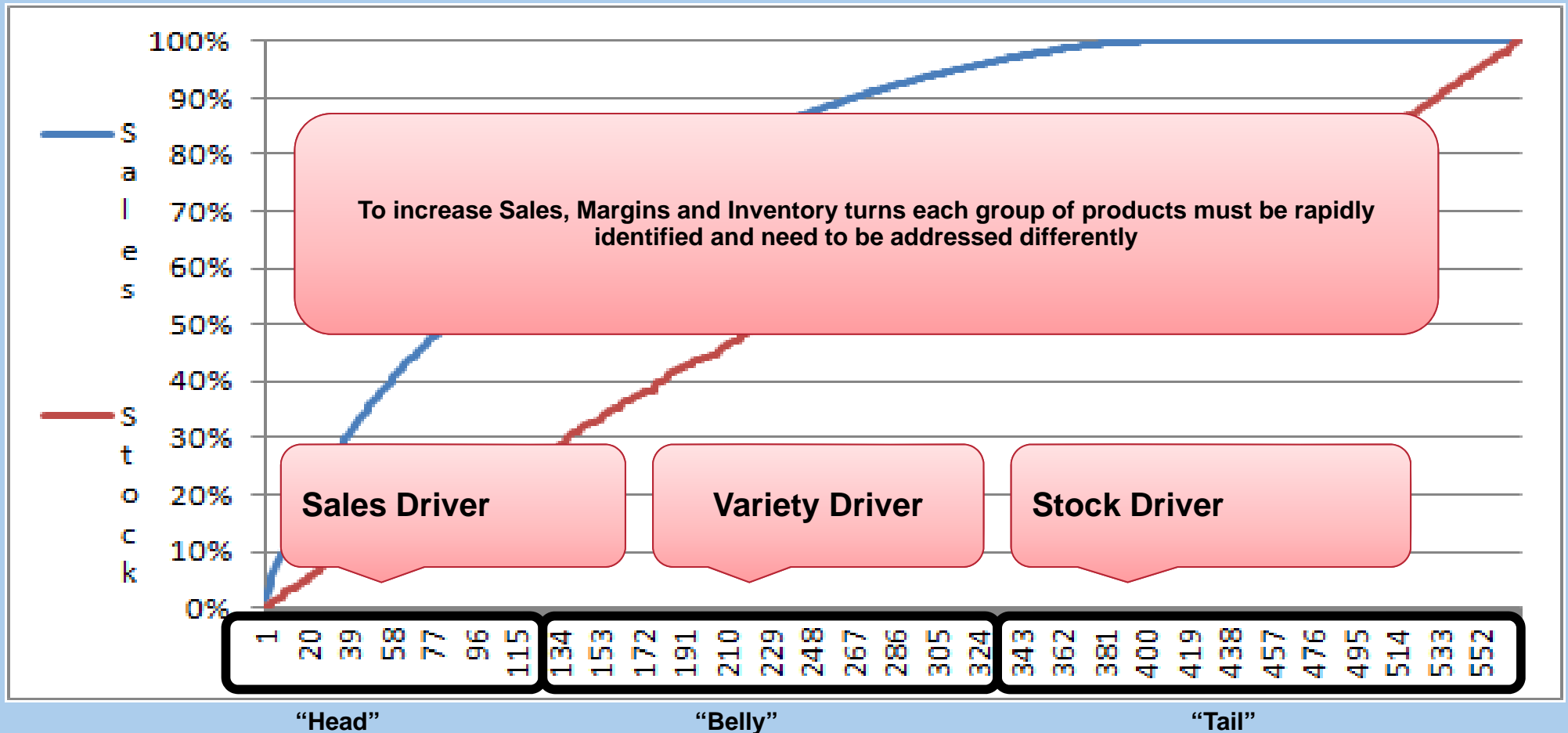
# Household furniture, The most selling category: Bed

## HD TOP1 家具ベッド



# Different products behave differently

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**Step 2**

# SYNCHRONIZE PROCESSES



## Step 2: Synchronize Key Processes

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- ***Our wish list: How can we capture all the sales opportunities...***
  - ***By introducing enough new products, but without packing the store with inventory***
  - ***By offering adequate products range and sufficient availability for our product, but without aging inventory***
  - ***By doing attractive Sales promotions, but without aging inventory***

# Process Synchronization (Example)

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- ***How do we ensure we have high success rate of NPI, but without packing the store with inventory (and without cannibalizing best sellers)?***

# Jewelry Example: Old Process

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## ➤ **Old Process:**

- *~6500 new products introduced yearly in two major events*
- *Stores were called to a NPIM event to evaluate the new designs and select the bulk of new products they desire*

## ➤ **Yet...**

- *Very few new products became best sellers*
- *Large amount of the new products ended up in the Tail*

# Jewelry Example: Process Scope Change

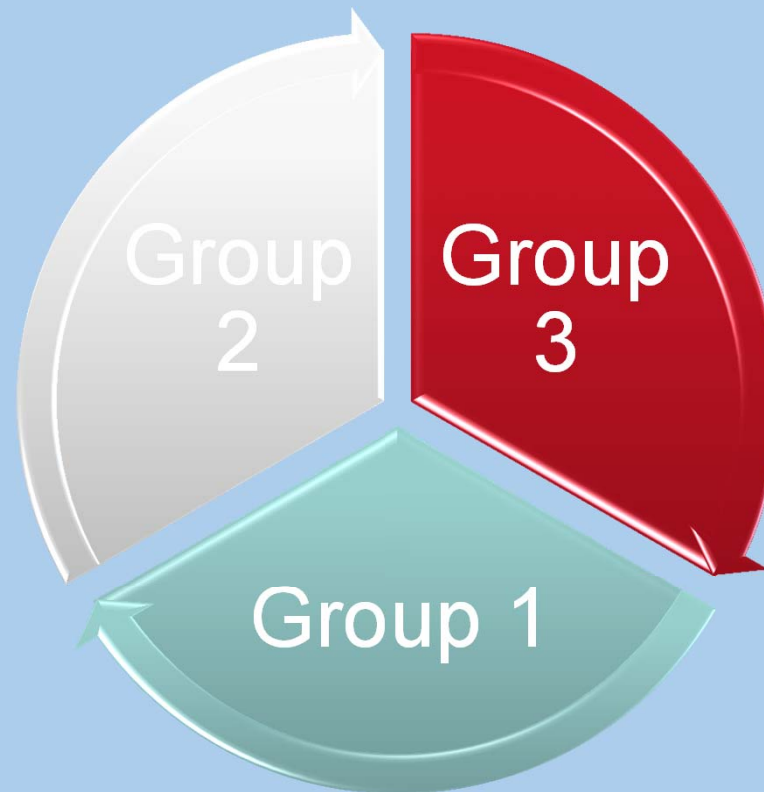
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<b>Criteria</b>	<b>Old NPIM process</b>	<b>New Core Process</b>
Yearly scope of NPI (Plain & Studded)	10000 (FY 09-10)	2364 (FY 11-12)

# Jewelry Example: Populating NPI in Stores

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➤ ***We divided our stores to three equal groups:***



**Each group is getting a unique set of New products for 4 months**

**During the 4 months the New Products are on replenishment**

**After 4 months the sets are rotated between stores**

## ➤ **Process Outcomes**

- **Newness** - Store have high level of newness throughout the year (level of newness is controlled centrally)
- **Head** – 38% of the yearly introduction were identified as newly emerged Best Sellers
- **Tail** - Only 12% of the NPI ended up in pure Tail (got deactivated after 6 months)

**Step 3**

**RESPOND FAST  
(TO ACTUAL DEMAND)**



# Step 3: Respond Fast to Actual Demand

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## ➤ ***We need to develop the capabilities to respond fast to actual demand***

### ***1. Identify actual demand***

- Rapidly, immediately when going into a new season, NPI, new store***
- Ongoing monitoring of demand***

### ***2. Respond quickly***

- Re-Supply, Product de-activation, Liquidation***
- Stock Norm alignment, Range alignment***

# Supply Chain Re-Configuration

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- ***Our Supply Chain is fine-tuned to deliver the forecast***
- ***We can re-configure our supply chain from forecast driven to demand driven by adopting the three rules below:***
  - ***Frequent Re-Supply***
  - ***Aggregating Inventory***
  - ***Demand Based Norms***

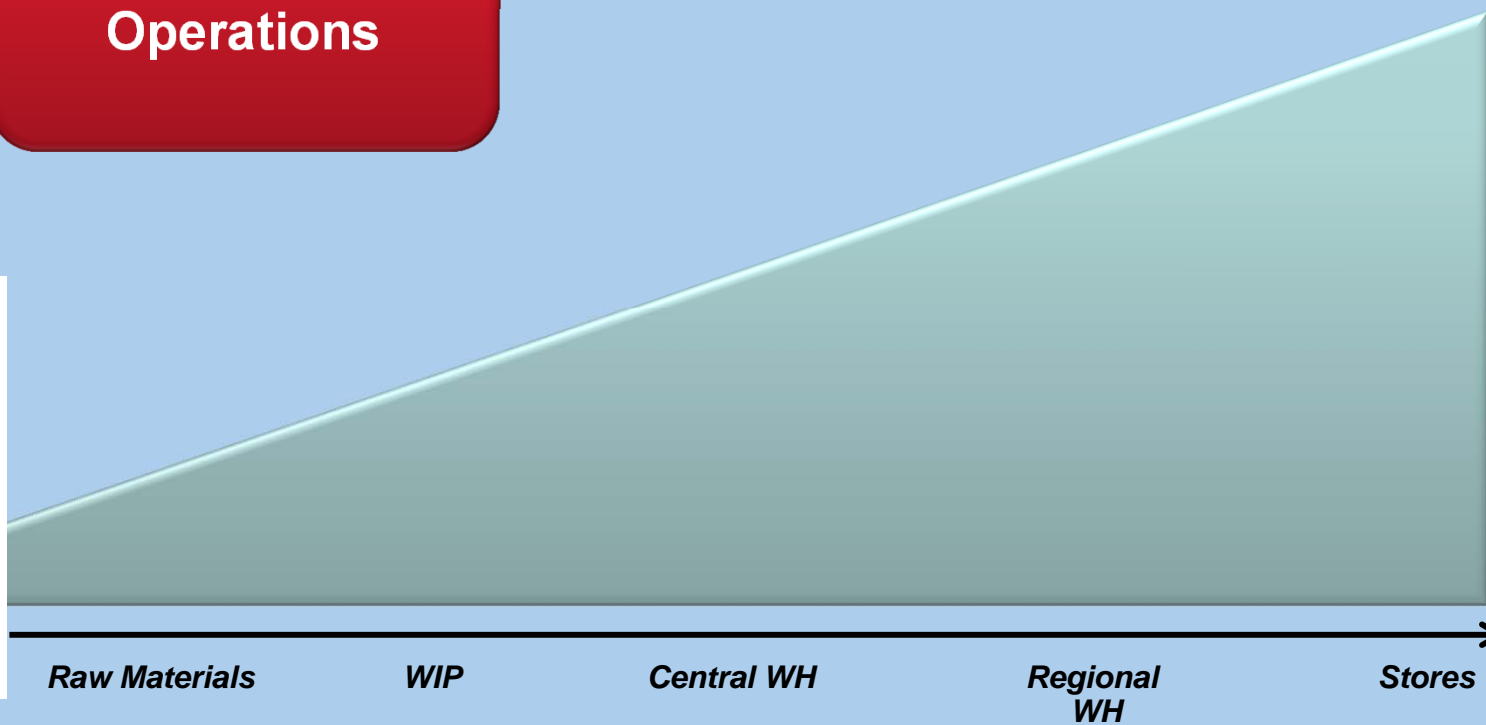
By holding most of our inventory upstream (in aggregation points) rather than downstream (close to the stores) we can significantly shorten our response

Re-aligning our inventory norms frequently with actual demand ensures our inventory is in-line with demand

# Supply Chain Re-Configuration (Illustration)

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**Forecast Mode of Operations**



**Most of the inventory is downstream, closer to the customer**

**Infrequent delivery to based on forecast**

# Supply Chain Re-Configuration (Illustration)

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**Demand driven  
mode of  
Operations**

**Inventory is balanced  
across aggregation points**

**Frequent Re-Supply to  
demand based norms**

*Raw Materials*

*WIP*

*Central WH*

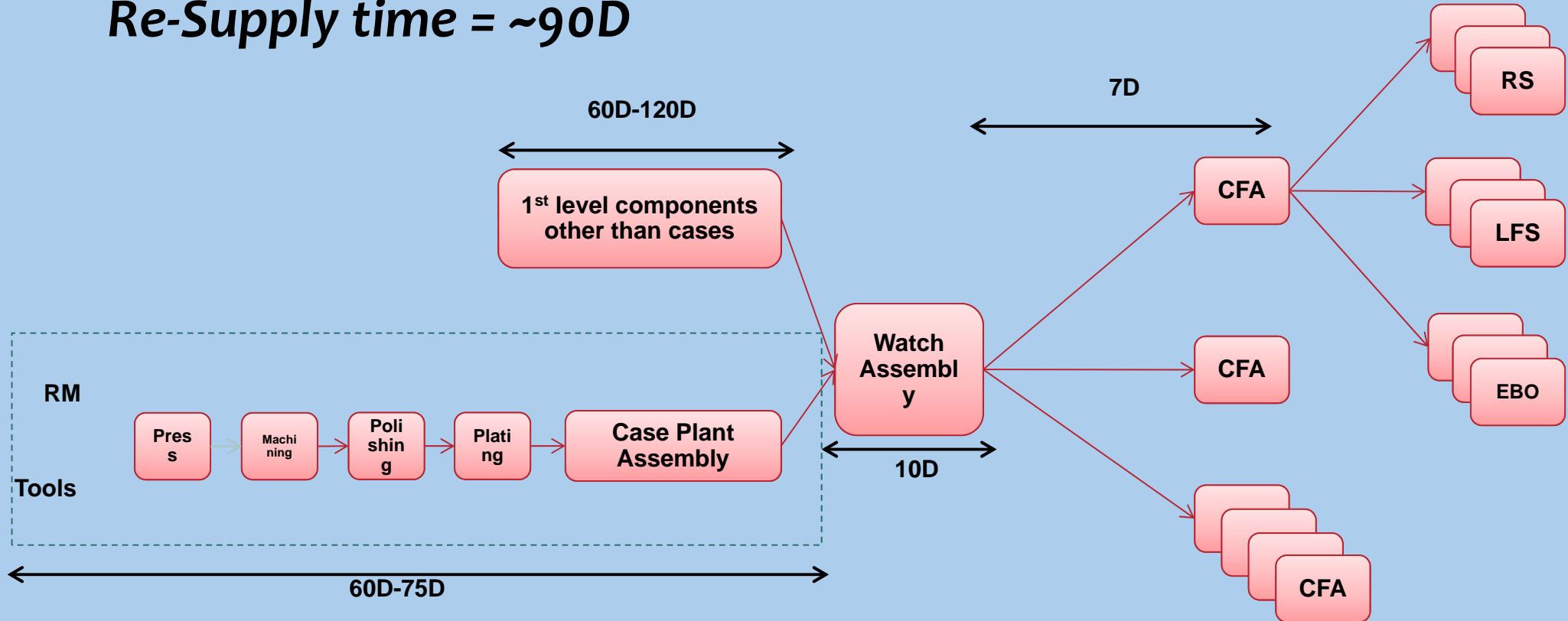
*Regional  
WH*

*Stores*

**Total inventory in the supply chain is reduced**

# Watch Example (Before)

Re-Supply time = ~90D



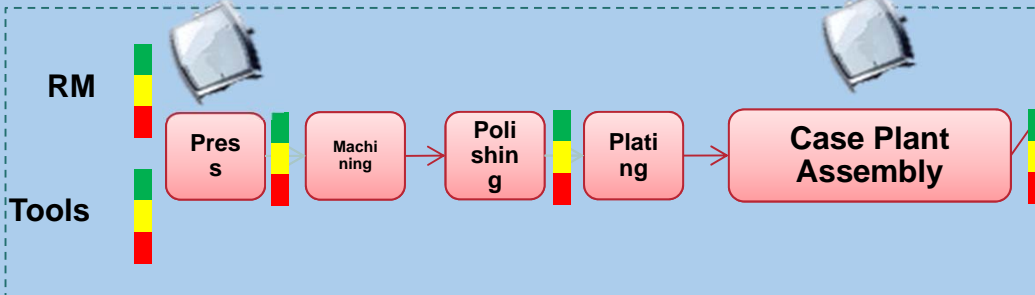
# Watch Example (After)

Re-Supply time = ~17D



Monthly to Weekly Re-Supply

1<sup>st</sup> level components other than cases



Watch Assembly CWH

10D

CFA

RS

LFS

EBO

CFA

Aggregation of Demand, daily Re-Supply

CFA

Buffers in aggregation Points, daily Re-Supply

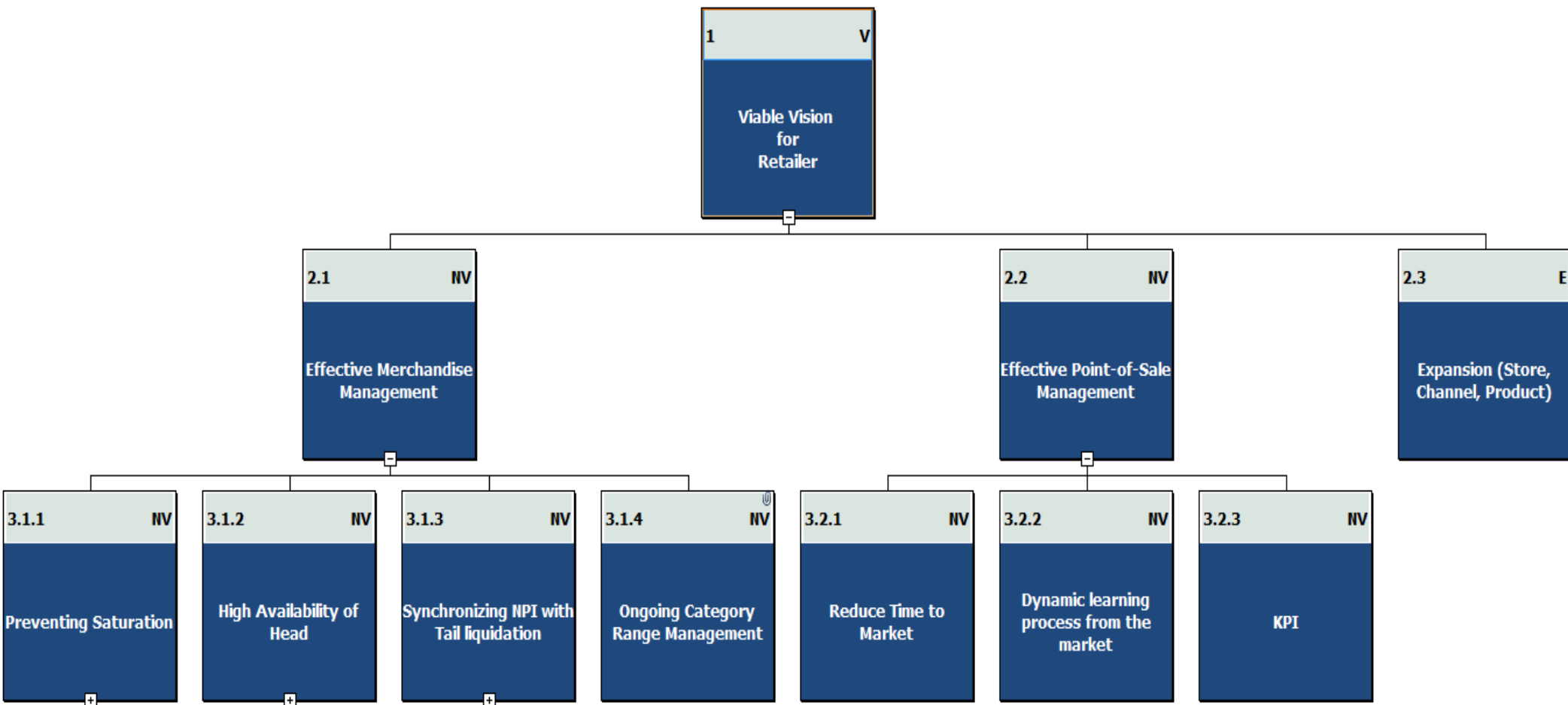
# Summary: The Three Concepts

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- 1. Prevent Saturation**
- 2. Synchronize Key processes**
- 3. Respond Fast to Actual Demand**

# Summary: The Three Concepts

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# ***GOOD LUCK!***

“Good luck means preparation meets opportunity”

Lucius Annaeus Seneca (4 BCE – 65 CE)