ON SHELF AVAILABILITY
ROOT CAUSES ISHIKAWA DIAGRAM
A FMI/GMA Trading Partner Alliance Report
The FMI-GMA Trading Partner Alliance began researching the out-of-stock problem in 2013. At the 2014 TPA Supply Chain Conference, it showcased a Good-Better-Best maturity model for improving On Shelf Availability (OSA). As part of the phase II of the journey to achieve 98+% OSA, the alliance surveyed Manufacturers and Retailers to better understand how a wide range of practitioners are currently addressing out of stock issues. The survey results were consistent with the alliance’s previous diagnosis and confirmed the gaps between current practices and future desired state. The white paper the alliance published at the 2015 Supply Chain conference included an updated “One Supply Chain” Good-Better-Best maturity model with definitions and recommendations on how to address the identified gaps in metrics/data, process/practice, organization and technology. In its phase III of the journey, the alliance validated several of the white paper recommendations via Retailer-Manufacturer learning pilots and collaborated to produce industry tools to both analyze and action against OSA opportunities.

The On Shelf Availability Root Causes Ishikawa diagram focuses on five root cause areas:

- Store Execution
- Ordering and Execution
- Forecasting
- Manufacturing
- Category Management and Merchandising
**ON SHELF AVAILABILITY ROOT CAUSES ISHIKAWA DIAGRAM: A FMI/GMA TRADING PARTNER ALLIANCE REPORT**

**CATEGORIZATION MANAGEMENT/MERCHANDISING**
- Shelf space/SKU count mismatch
- POS velocity
- Undefined back stock minimums and vendor minimums
- Merging databases/systems
- Item info inaccurately recorded/deleted in database
- Late changes in promotion decision
- Features - not too many SKUs and not hitting sell through rate

**STORE EXECUTION**
- Schedule mismatch with replenishment timing and work load
- Improper scanning of items at checkout
- Unrecorded movement of items between departments
- Unrecorded items from replenishment shipments
- Manicowns initiated by store
- Back room storage/mismanagement
- Product lost in backroom
- Mismatched timing of working backstock

**MANUFACTURING**
- Policy that encourages retailers to wait to place order
- Transportation disruption
- New item unavailable
- Mismanagement of seasonal/temporary products
- Down counting
- Raw materials allocation
- UPC/GTIN code mismanagement
- No advance shipment notice/BOL and physical delivery/invoice quantities mismatch
- No zero order point
- Inadequate lead time for forecast before event "lock-up" "lockdown" date
- Variations in local demand and seasonality

**ORDERING AND DISTRIBUTION**
- Delivery frequency and timing mismatch with replenishment plans
- Warehouse out of stocks
- No store friendly pallet delivery
- Inadequate and inaccurate delivery fill rate
- Unaccounted backroom/inventory level
- Unaccounted inventory for manual and system orders
- No zero order point
- CAO overrides
- Unrecorded movement of items between departments
- Unknown/unrecorded shrinkage

**FORECASTING**
- Store continuing to allow CAO to order discontinued items
- CAO overrides
- Store stocker timing and ability to make "top-ship" adjustments in PI system impacts CAO forecast accuracy
- Not accounting for lost sales in forecasts
- Unexpired demand
- Variations in local demand and seasonality
- Not using store-level POS data for forecast and safety stock across supply chain
Acknowledgments

The FMI/GMA Trading Partner Alliance OSA Committee includes representatives from the following companies:

- The Clorox Company
- The Coca-Cola Company
- Delhaize America
- Food Marketing Institute
- GENCO
- Grocery Manufacturers Association
- H-E-B
- Inmar, Inc.
- JDA Software Group, Inc.
- McCormick & Company, Inc.
- Meijer, Inc.
- Mondelez International
- Nestlé USA, Inc.
- The Procter & Gamble Distributing Company
- Rite Aid Corporation
- Wegmans Food Markets, Inc.

Additional Information

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