

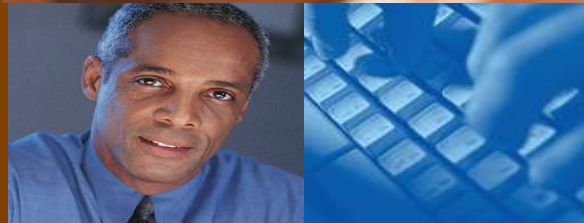
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Real Implementation (Challenges and Benefits)

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Introduction and Objectives

- **Company Background**
 - Worldwide Confectionary Products Company:
 - Annual Sales - \$10 Billion USD
- **SOP Improvement Project**
 - **Scope**
 - North Latin American Region (México, Caribbean and Central America)
 - Sales - \$600 Million USD
 - **Charter**
 - Project Sponsor – President
 - Project Leader – VP Supply Chain
 - Objectives:
 - » Increase Product Availability by 2%
 - » Decrease Inventories by 10%
 - » Reduce Write Off's by 35%
 - » Reduce Total SC Costs by 5%
 - » Improve new product ROI by 5%
 - **Goal – Generate Benefits of at least \$6 M USD**



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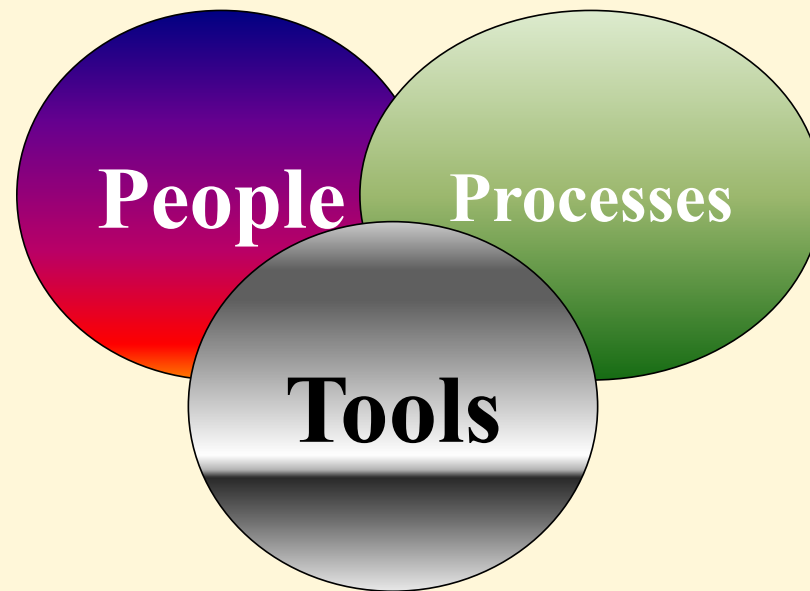
Topics

- SOP Model and Implementation Plan
- Main Findings and Recommendations on the SOP Sub-Processes

Business Model Finding

- Overall, the business model was design to support a Market with Low Finish Goods Options.
- Current Market Reality is a Market with High FG options and Many Promotions.
- The SOP and underlying processes needed to be modified based on the new market reality

Always Review the Following



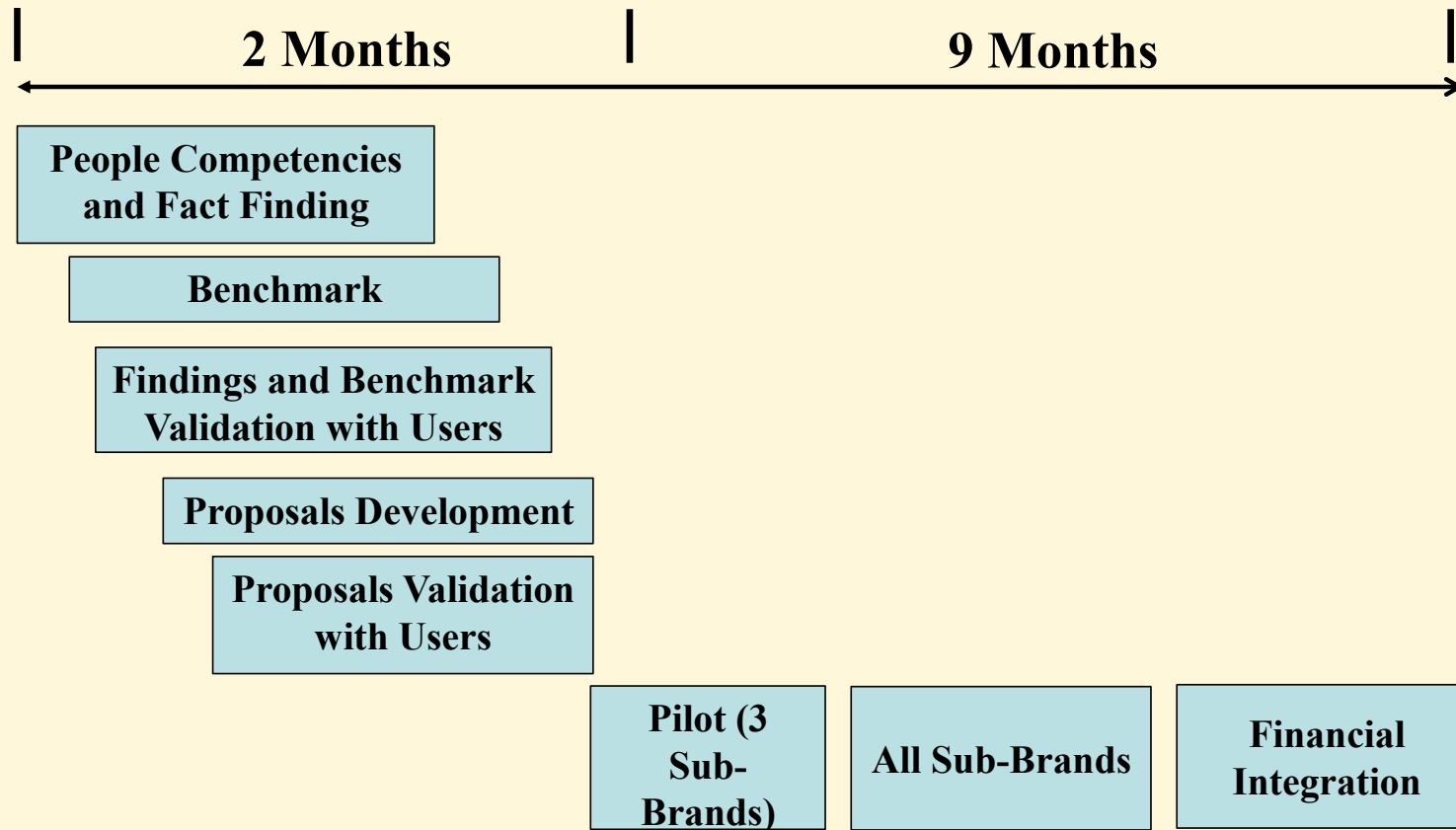
Main Challenge

- **People Behaviors**

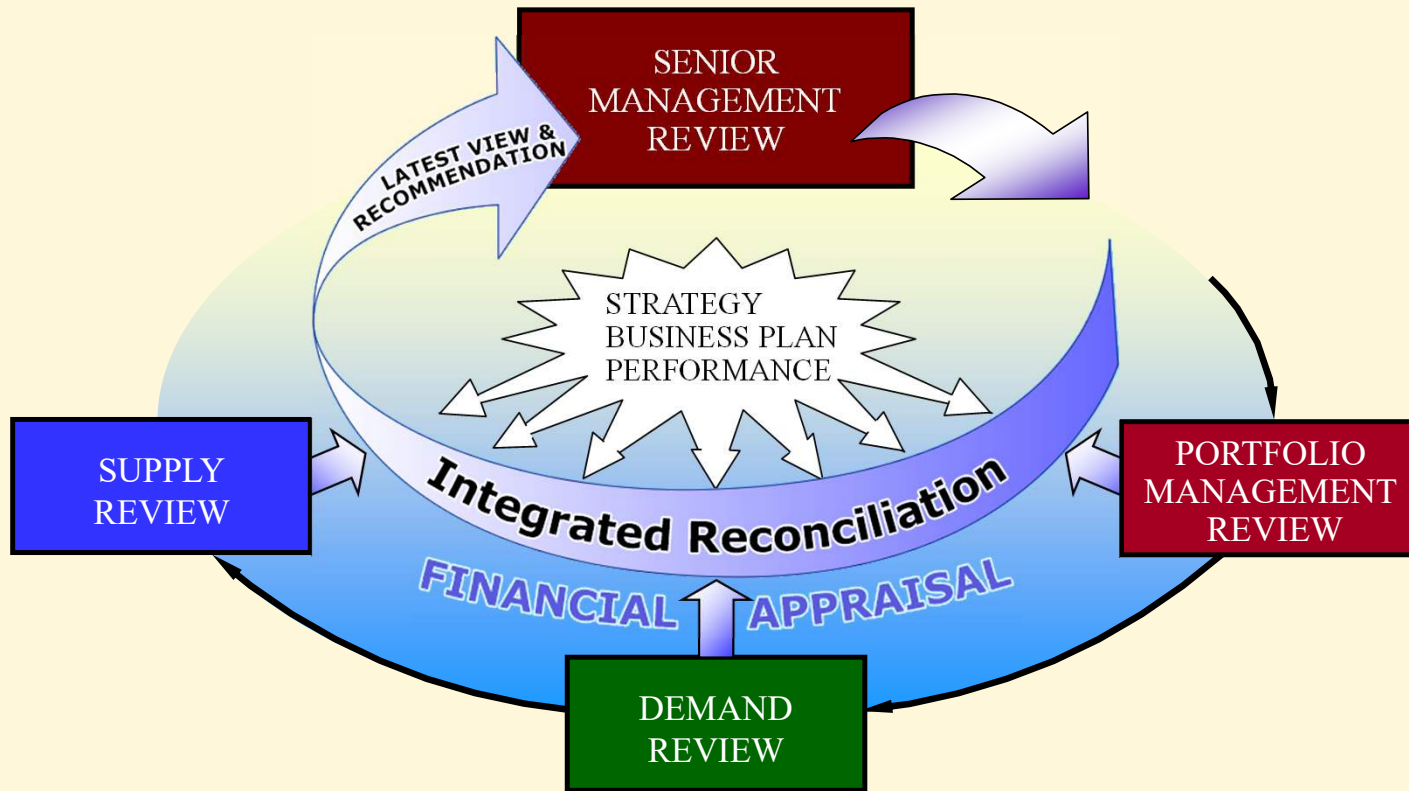
- Successful Requirements

- Leadership and Stewardship
 - Right Project Leader
 - Education and Training
 - Outsider with Knowledge and Proven Success
 - Right Project Team

Project Plan



SOP Model Followed (Monthly Process)



Fact Finding

1. Portfolio Management (Pareto Findings)

- a. Lack of Good Project Management Methodology
 - i. High Product Development Costs due to Urgencies and Improper Risk and Change Management Processes (Not following Project management Methodology)
- b. Operation Development Personnel Lacking Seniority and Training.
- c. SC Users not committed to Innovation.
- d. Development Department Main Focus was on Delivering the Product Fast and Make Changes as Required by Marketing without Analyzing Total Implications



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Fact Finding

1. Portfolio Management (Pareto Findings)

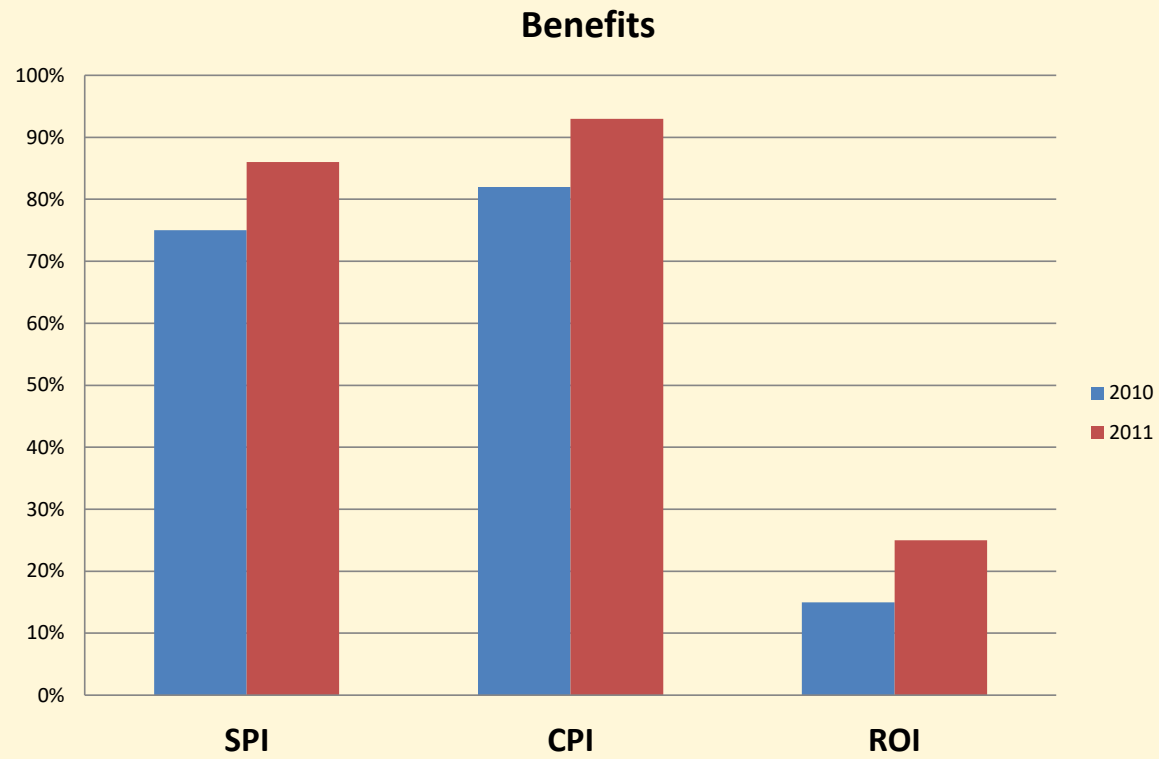
- e. Lack of Good Project Management Methodology
 - i. Lack of Right KPI's
 - a) Only one used was TTM
 - b) Not using SPI and CPI and measuring the ROI after three months
- f. Lack of Good Design of Experiments
- g. Weak Learning Curves Process
- h. Product Rationalization NOT based on market, and profit facts
- i. PM Software stand alone, and used just for time tables, not able to share status properly, costs and resources



Portfolio Management Proposal

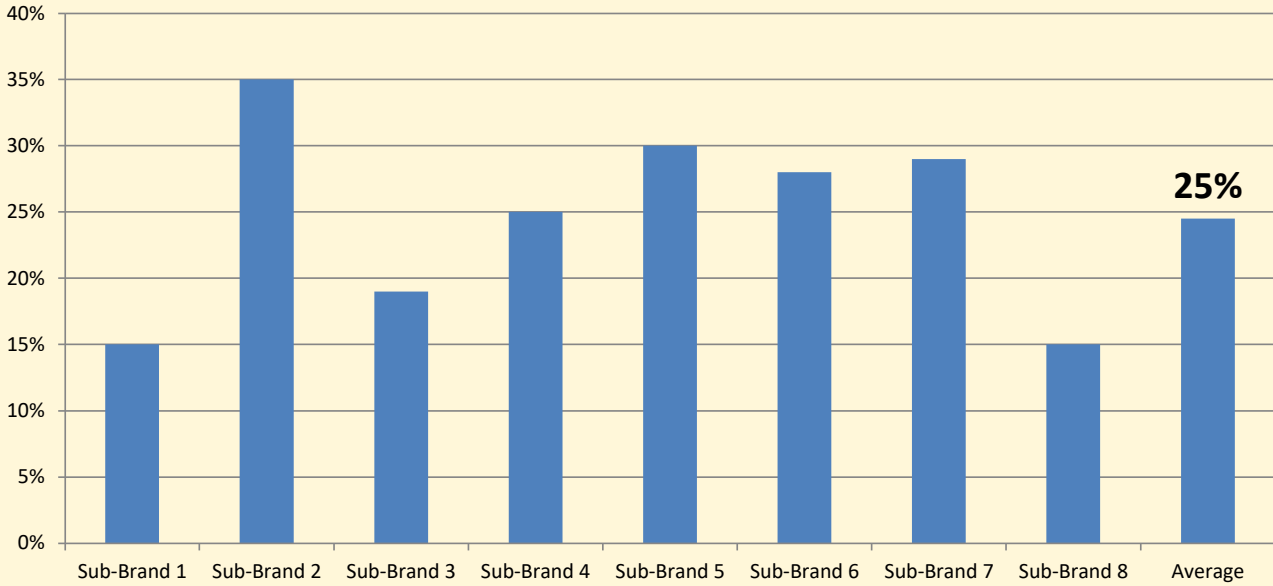
- Train in PM Methodology
- Change Personnel
- Implementation of a PLC Process and New Product Development Methodology along with an EPM Software
- Implement New KPI's
- Assign NPI KPI's to SC Personnel also.

Portfolio Management Benefits



Demand Finding

July Absolute Forecast Error
(Lag 3)



- High Forecast Error
- Assumptions not being documented

Demand Finding

Monthly Bias 6
Month Calculation



High Monthly Bias **NOT** Being Measured



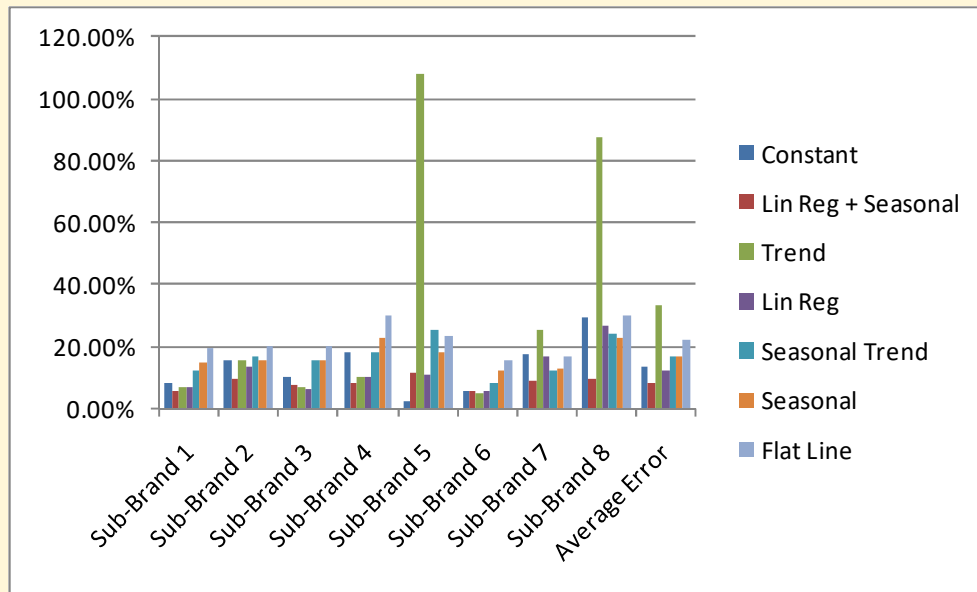
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Demand Finding

	Constant	Lin Reg +		Lin Reg	Seasonal		Flat Line
		Seasonal	Trend		Trend	Seasonal	
Sub-Brand 1	8.58%	5.74%	6.75%	6.91%	12.31%	14.94%	19%
Sub-Brand 2	15.62%	9.50%	15.82%	13.32%	16.62%	15.59%	20%
Sub-Brand 3	10.50%	7.53%	7.26%	6.21%	15.78%	15.43%	20%
Sub-Brand 4	18.44%	7.97%	10.15%	10.26%	18.46%	22.93%	30%
Sub-Brand 5	2.67%	11.45%	108.27%	11.18%	25.63%	18.15%	24%
Sub-Brand 6	5.89%	5.55%	4.97%	5.70%	8.35%	11.98%	16%
Sub-Brand 7	17.83%	9.24%	25.24%	16.67%	12.53%	12.99%	17%
Sub-Brand 8	29.16%	9.91%	87.38%	27.06%	24.03%	22.95%	30%
Average Error	13.59%	8.36%	33.23%	12.16%	16.71%	16.87%	21.93%

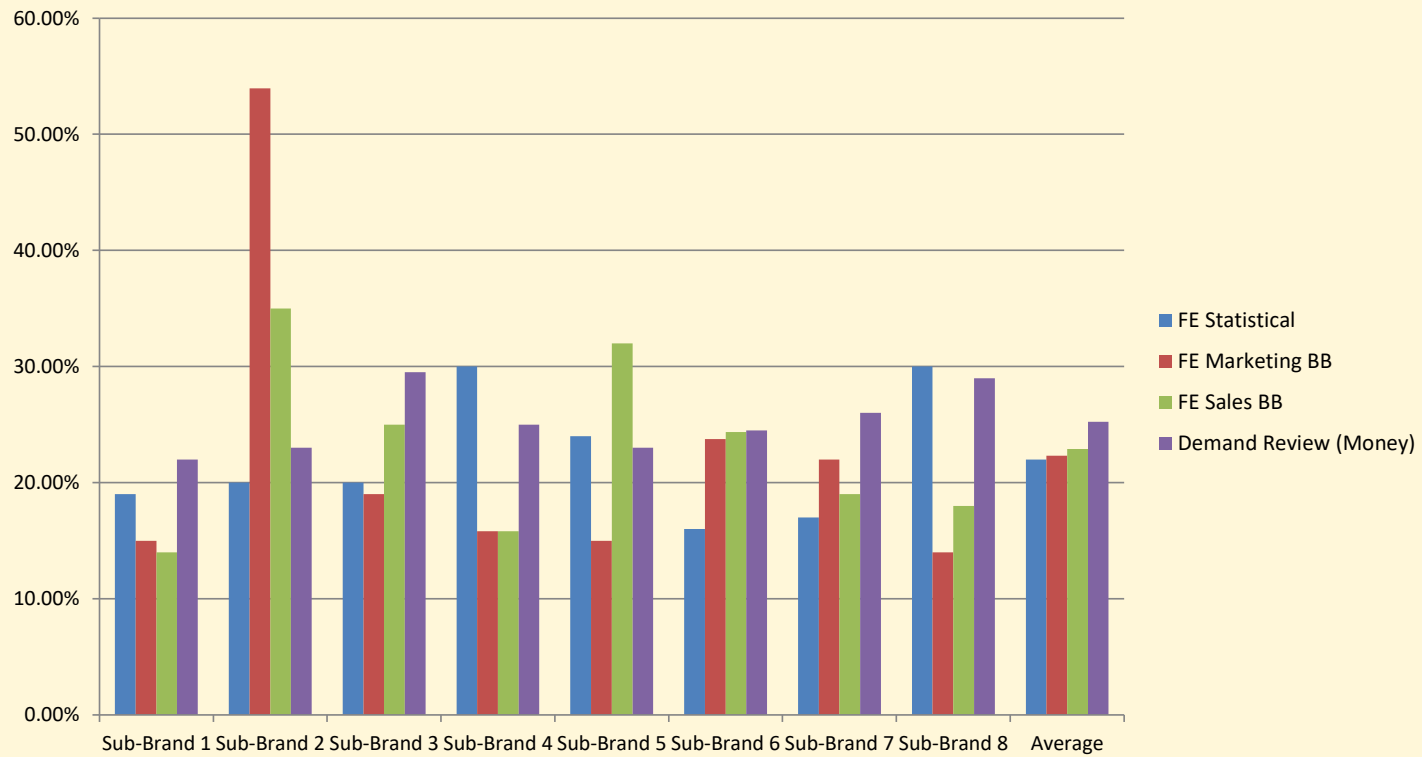


Only using the Statistical Model of Flat Line in the APO software, which did not delivered the best results (It was used like an Excel Spreadsheet)

*** Used Ex-Post Forecast to Obtain this Data**

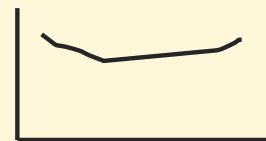
Demand Finding

Forecast Value Added **NOT** Being Measured

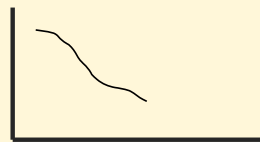


Demand Finding

- Statistical Forecast was being done at sub-brand and national level, and then split into SKU's and into CD's (Its is mainly a top down approach)
- It lacks the different demand patterns at SKU and CD level



National Demand



Demand in CD 1



Demand in CD 2



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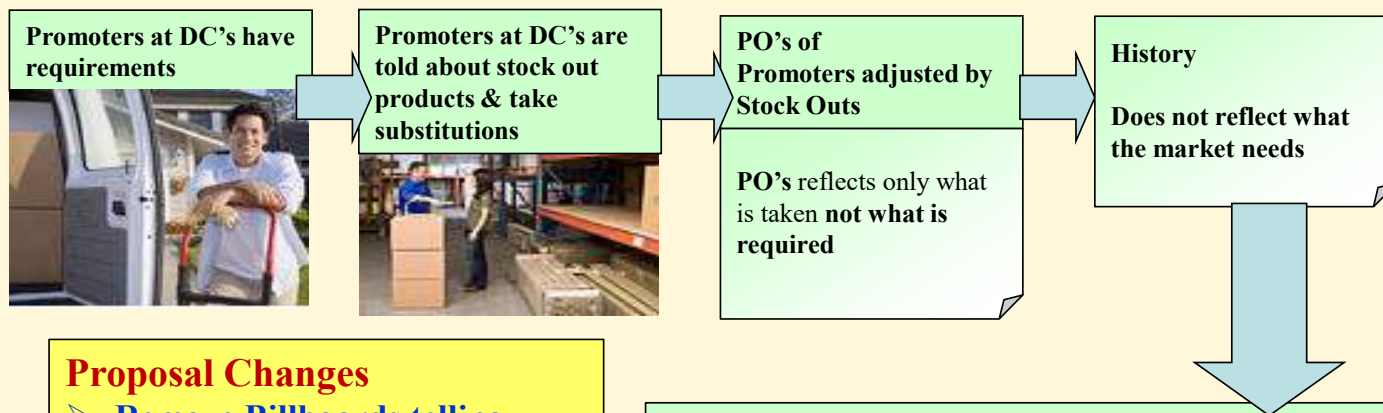


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Demand Finding

Framed issue:

True commercial demand is not captured when we do product substitution.



Proposal Changes

- Remove Billboards telling Promoters about Stock Outs
- Cashiers will register original PO's from promoters (This data will be used to know real demand, fill rates, and as input to forecasting process)
- PO's will be adjust based on stock outs.

Future Planning

Is based on historical information

Customer Service

Fill Rate was not being measured since it had 100%. Only checking CD's without product, but this does not mean there is need for them

Forecasting does not know the true market needs

Production Planning does not know the true market needs

Demand Finding

- Forecasts are being constrained at the Demand Review meeting, SC people worked on obtaining SC resources based on constrained data
 - Un-Constrained Forecast 15,000 cases
 - Constrained (Sales people took away the Wholesaler Channel – 4,000 cases) 11,000 cases was the new forecast
 - Supply Capacity 10,500
 - Supply just worked to increase supply by 500 cases

No Integrated Reconciliation Process

- 1) **If Resources are OK, Forecast = Sales Plan**
- 2) **If Resources NOT OK, Supply Plan = Sales Plan**
(Products to Supply, Discuss and Agreed at the IRP)

Demand Finding

Demand Control being done in a monthly cycle.

Proposal

- Weekly demand control

Demand Finding

- High Demand Variations Due to Promotions not being Planned and Measured

Date	SKU 1
	549
Dec	135
Jan	135
Feb	120
March	345
April	120
May	1,350
June	60
July	780
Aug	1,065
Sep	990
Oct	707
Nov	1,125
Dec	1,575
Jan	1,125
Feb	630
March	585
Apri	1,425
May	1,200
June	1,035

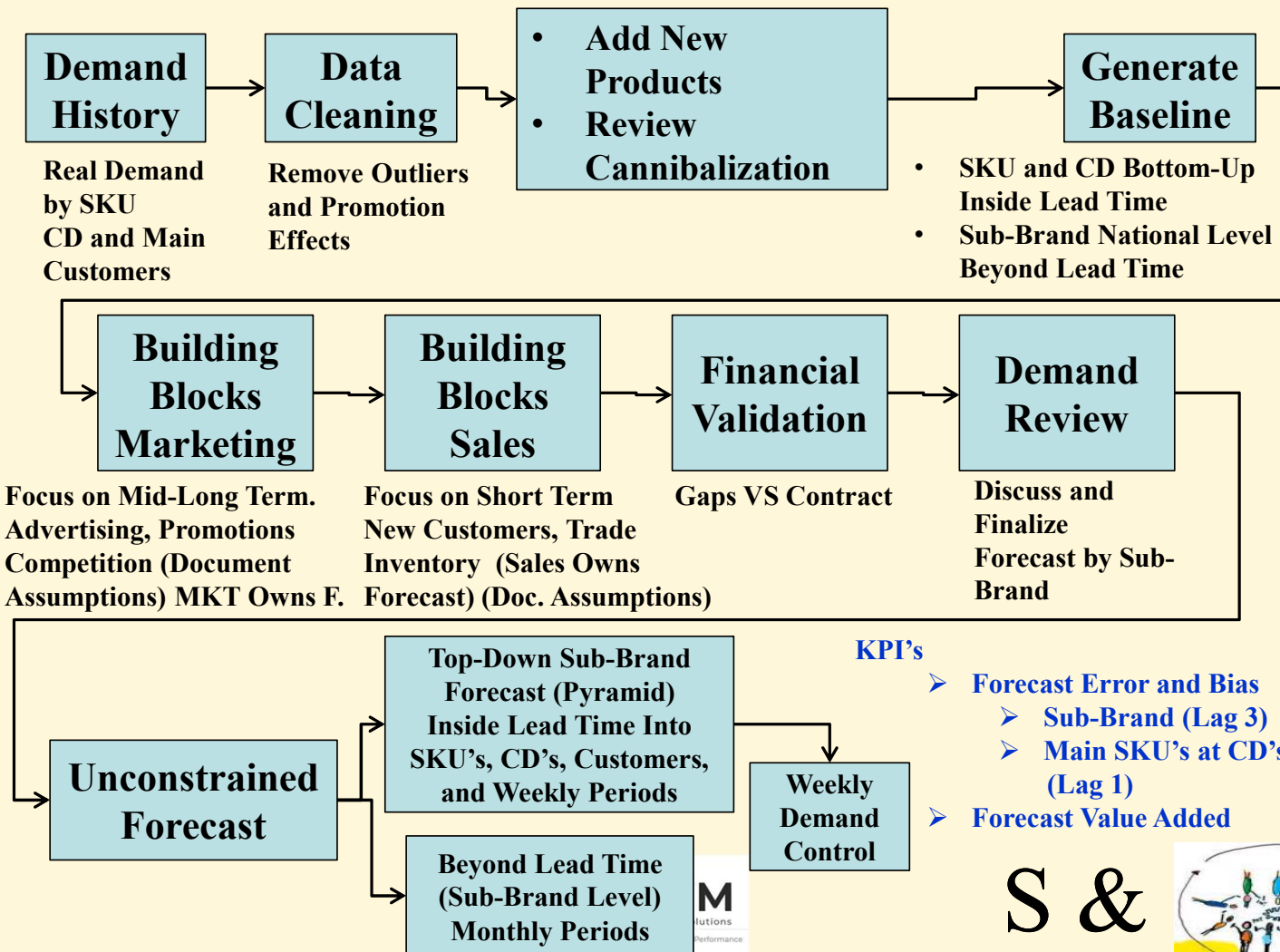
Promotion

Very Low Sales
(Channel was Filled)

Proposal:

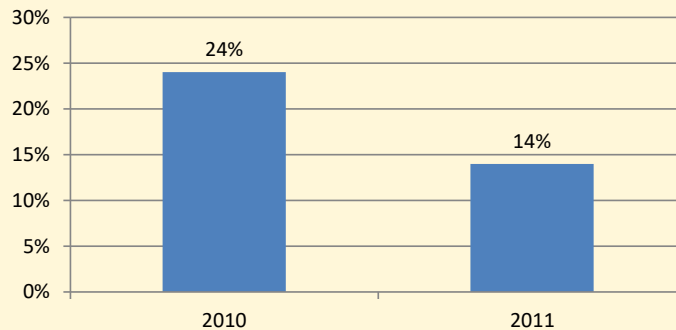
- Promotions Needed to be Planned an ROI Justified
- Sales people need to understand better the Sell In and Sell Out concept
- Demand History Needs to be Cleaned before the Statistical Forecast is Run

New Demand Process

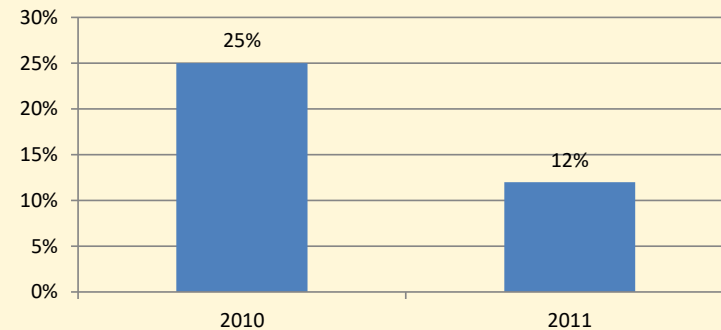


Demand Improvements

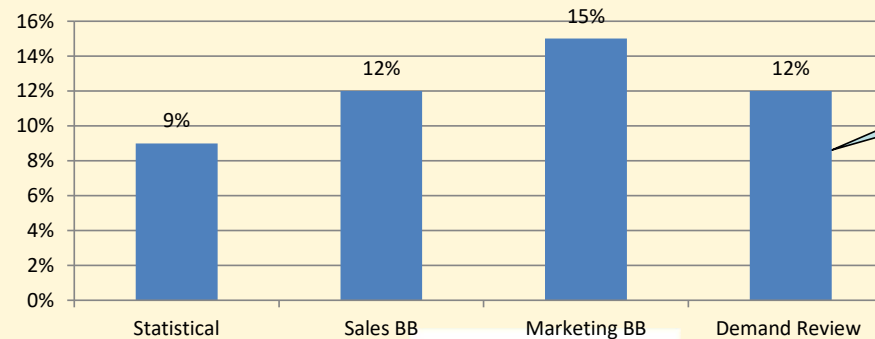
Sub-Brand Bias Absolute Average



Sub-Brand Forecast Error Average



Forecast Error and Value Added Comparative Average



Building Blocks and Assumptions Still Need Improvement

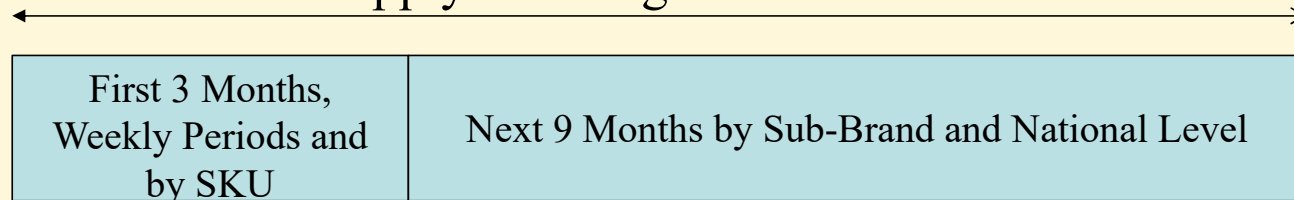


Supply Planning Finding

Supply Planning Horizon Lacking Critical Resource Planning

**Resource with the Longest Lead Time
New Factory – 14 Months**

Current Supply Planning Horizon 12 Months



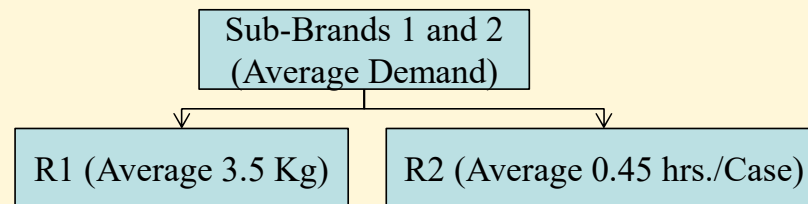
***Increase from 9 to 11 Months the Supply
Planning Done at Sub-Brand Level***

Supply Planning Finding

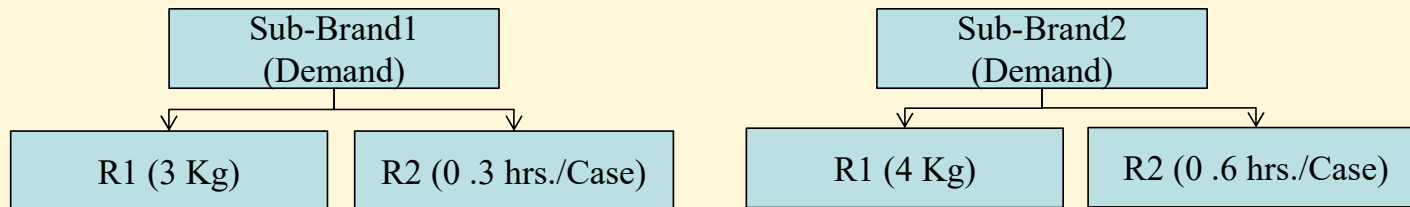
Bill of Resources and Resource Planning Lacking Proper Process

Current Process

July Sub-Brands Demand 2,050
Capacity Requirements R1 (Kg) 7,175
Capacity Requirements R2 (Hrs) 923



Proposal (Just 2 Sub-Brands Shown as Example)

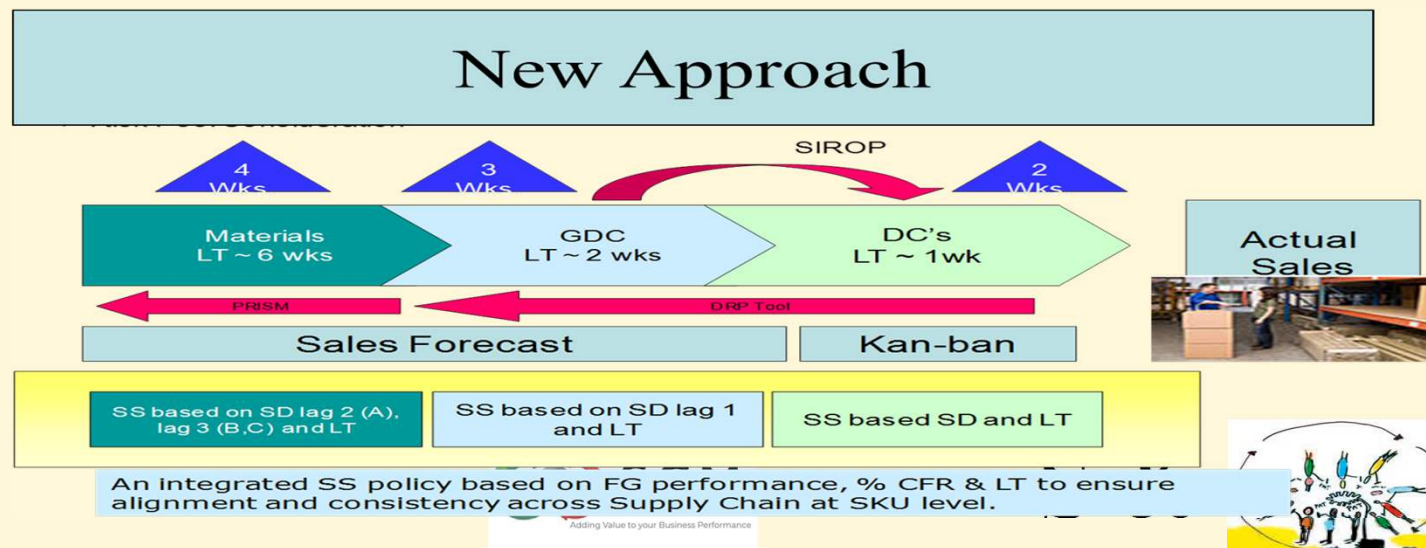


	Sub-Brand 1	Sub-Brand 2	Capacity Requirements
July Demand	300	1,750	
Capacity Requirements R1 (Kg)	900	7,000	7,900
Capacity Requirements R2 (Hrs)	90	1,050	1,140

Supply Planning Finding

Planning Parameters Lacking Right Methodology

- **Previous Safety Stocks Calculations**
 - Done at Sub-Brand Level Only
 - Based on what the Planner thought was right
- **Key Changes**
 - FG Policies from Sub-Brand to SKU
 - SS based on statistics (Variations of Demand and Deliveries), Lead Time and Lot Sizes
 - Focus on Flexibility
 - Risk Pooling
 - Increasing RM Inventories and Decreasing FG (There is a lot of commonality in RM)
 - Move to a Pull approach from DC's to GDC



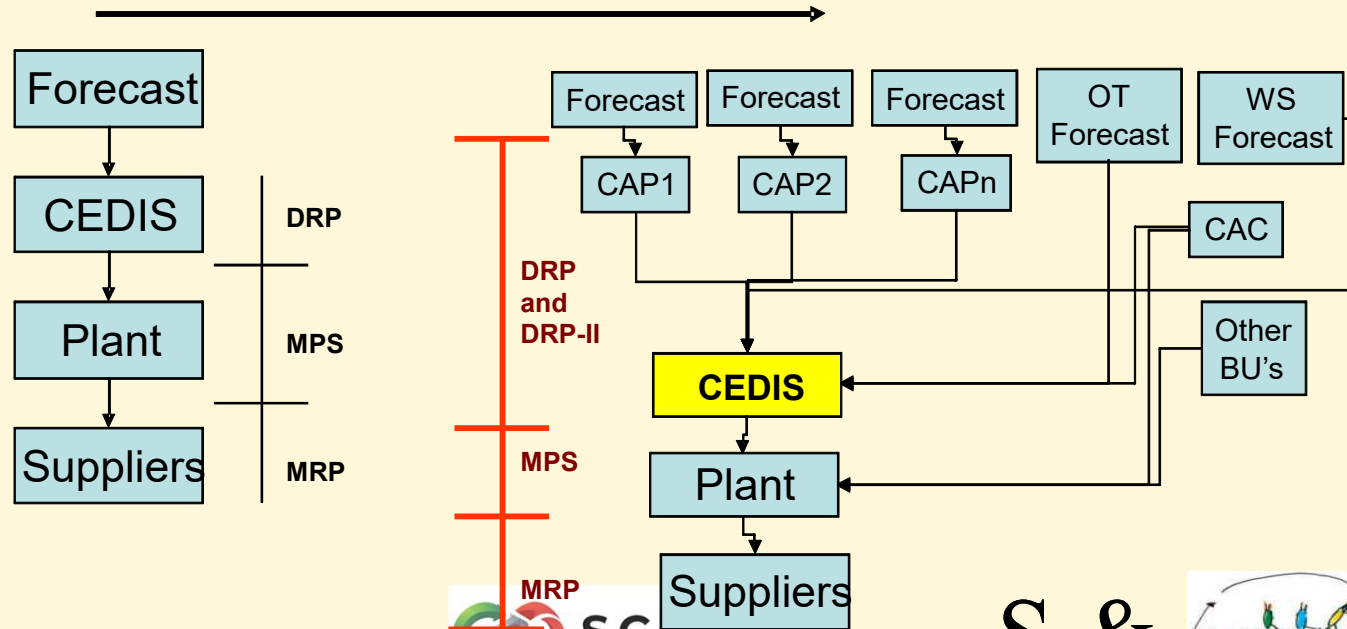
Supply Finding

From:

- Excel
- Main Distribution Center Only
- Limited Visibility
- Planning Parameters not Aligned
- Not taking into Account different Sales Channels

To:

- Integrated DRP Tool
- DRP and DRP-II
- Alignment of Planning Parameters
- Different Sales Channels
- Visibility of Demand and Inventory at Distribution Centers and Sales Channels



Supply Finding

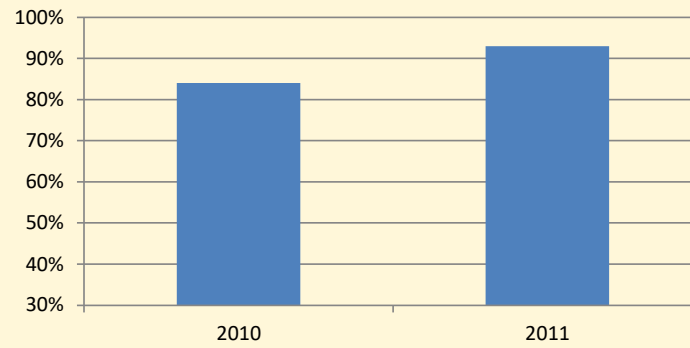
➤ No Financial Appraisal

New Format Proposed and Used

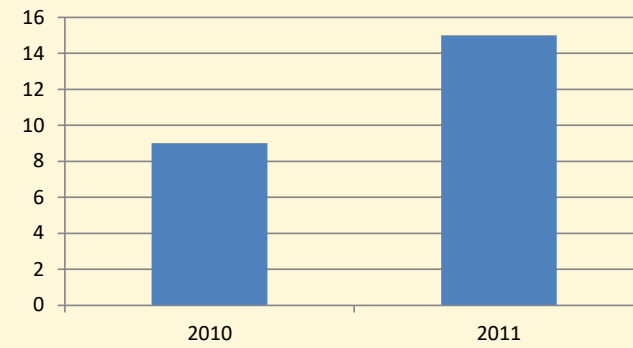
Sub-Brand 1				Unit of Measure										0000\$	
Target OTIF	92%				Target Finished Inventory										25 Days on Hand
					Unit Cost										\$10
	History													14 M	
	J	F	M	A	M	J	J	A	S	O	N	D	J-M	Total	
Operations Cost															
New Plan	\$250	\$280	\$320	\$200	\$280	\$260	\$290	\$250	\$320	\$320	\$350	\$350	\$1,500	\$4,120	
Actual	\$230	\$292	\$330												
Diff	\$20	(\$12)	(\$10)												
Cum Diff	\$20	\$8	(\$2)												
Finished Goods Inventory Costs															
New Plan	\$175	\$196	\$256	\$160	\$224	\$208	\$238	\$208	\$269	\$269	\$294	\$294	\$1,260	\$3,423	
Actual	\$184	\$232	\$330												
Days on Hand	24	24	30	24	24	24	24.6	24.9	25.2	25.2	25.2	25.2	25.2	24.92403	
OTIF	91%	92%	93%												

Benefits

OTIF

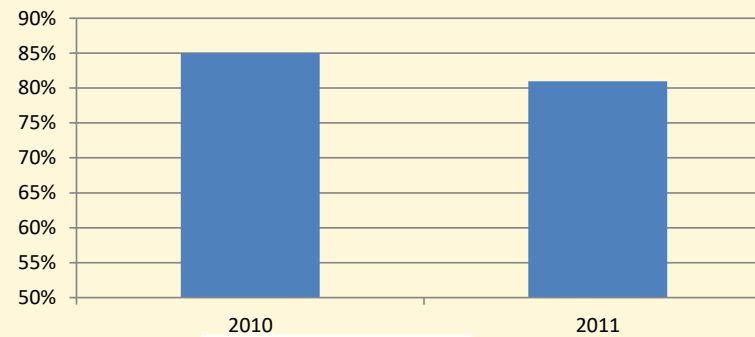


STR



SCC as % of Sales

(Price Increases Adjusted in this Data)



Integrated Reconciliation Finding

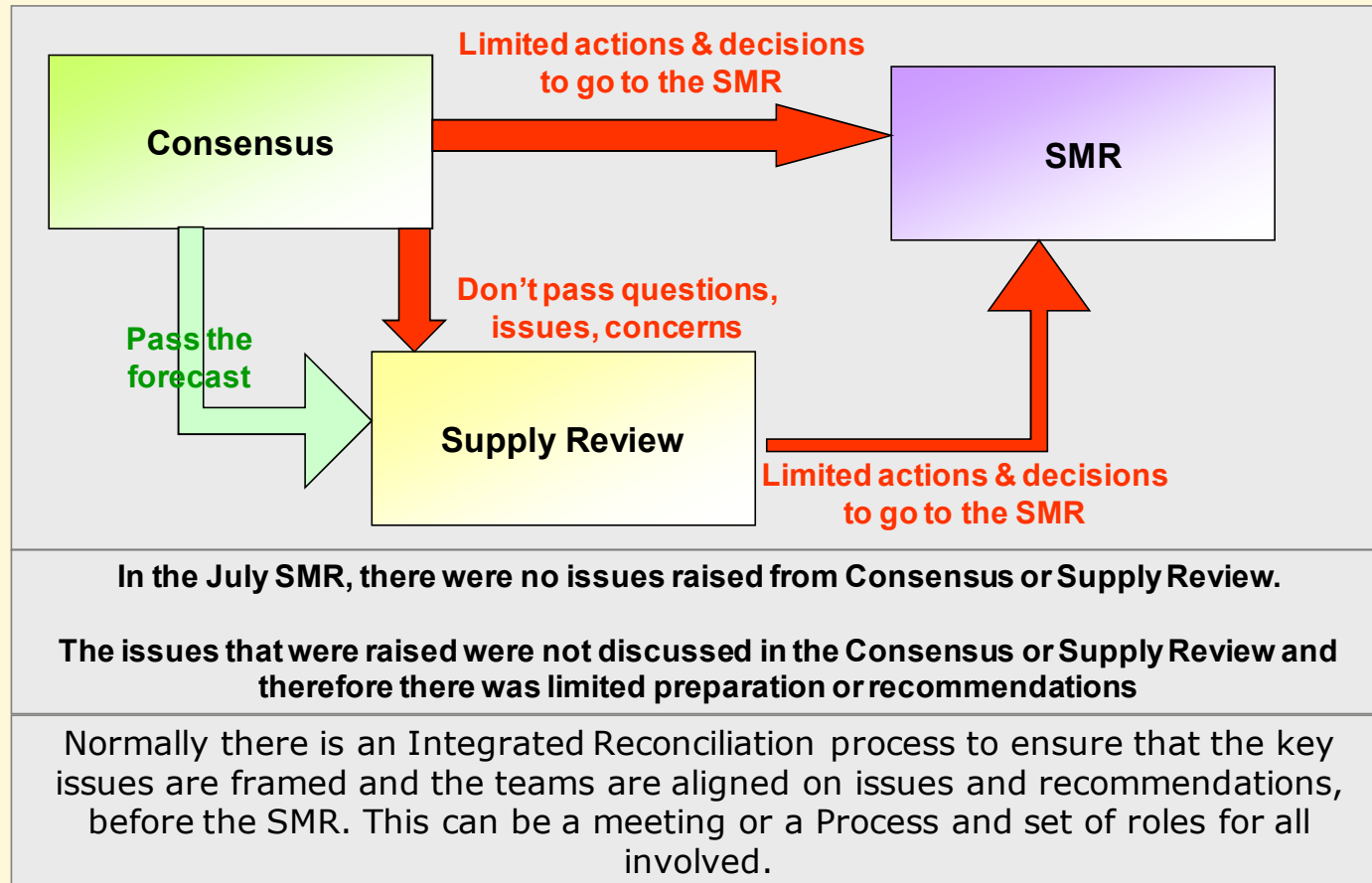
1. There is NO Integrated Reconciliation Process (Pre-Meeting) before the SMR Meeting
 - Proposal
 - Develop Alternative Scenarios for Resource Problems needing Review at the Pre-Meeting (3E)
 - Minor decisions – by supply and sales people
 - Moderate decisions – A new shift, minor recruitment of sales personnel, for example – Pre-Meeting
 - Major Decisions – New machines, another plant. Pre-Meeting and Executive meeting

Financials Not Integrated (New Format Approved)

All Sub-Brands			Unit of Measure											0000\$		
Target OTIF	92%		Target Finished Inventory											20 Days on Hand		
			Unit Cost											\$12		
	History												Apr - May			
	J	F	M	A	M	J	J	A	S	O	N	D	J-M	Total		
Sales Plan																
New Plan	\$2,900	\$2,800	\$3,100	\$3,120	\$3,400	\$3,600	\$3,700	\$3,800	\$3,500	\$3,400	\$3,100	\$3,600	\$17,000	\$48,220		
Actual	\$2,700	\$2,950	\$3,160											Jan-Dec	Budget	Diif
Diff	(\$200)	\$150	\$60											\$40,020	\$40,500	(\$480)
Cumm Diff	(200)	(50)	10													
														14 M		
Operations Cost																
New Plan	\$2,320	\$2,240	\$2,480	\$2,496	\$2,720	\$2,880	\$2,960	\$3,040	\$2,800	\$2,720	\$2,480	\$2,880	\$13,600	\$38,576		
Actual	\$2,376	\$2,300	\$2,350											Jan-Dec	Budget	Diif
Diff	(\$56)	(\$60)	\$130											\$32,016	\$33,000	\$984
Cum Diff	(\$56)	(\$116)	\$14													
														14 M	Balance	\$504
Finished Goods Inventory Costs																
New Plan	\$2,784	\$2,688	\$2,976	\$2,995	\$3,264	\$3,323	\$2,865	\$3,040	\$2,897	\$3,264	\$2,976	\$3,456	\$16,320	\$3,119.93		
Actual	\$1,584	\$1,533	\$1,567													
Days on Hand	18	16	15	18	17	19	20	19	18	19	21	18	21	19		
OTIF	91%	92%	93%													



SMR Finding: Issues not resolved in the SMR Cause: Limited integration of meetings



SMR Finding

1. Senior Management Review

	Improvement area	Issues
1	Major issues are not being included & resolved in the SMR meeting	<p>The meetings are independent and issues are not being turned into recommendations as often as they could</p> <p>Organisational alignment between Commercial & Supply Chain teams is not clear</p> <p>The agenda for SMR does cover all the areas we need to manage the business</p>

SMR Meeting Agenda

- Spending 70% of time on the past
- Covering some points in detail that should be covered elsewhere e.g. "DOS and Sales Quota"
- Attendees – too many to manage, effective use of time, to have good open conversation (22 people)
- Major Functional agenda items are missing

The image shows a presentation slide with a 'Score Card' section and an 'AGENDA' table. The 'Score Card' lists several categories: UNSV, QCFR, Planning performance, QSubsidiary, QBrand Performance, QNew products, QRisk & Opportunities, and QDecisions made. The 'AGENDA' table is a complex grid with multiple columns and rows, likely representing a detailed schedule or data set for the meeting.

- A sales / channel view of future issues, actions or recommendations
- A marketing view of the future issues, actions or recommendations. No projection of market trends
- No Supply Chain view of future issues, actions or recommendations E.g. Service or WC
- No view from any function of major business changes that may impact the future plans e.g. sales force expansion, pricing, Distribution optimisation.
- Limited horizon, primarily focused on the next 3 months

The meeting agenda and preparation needs some modification

Summary

- Always review People, Processes and Tools
- Get Senior Management Support
- Review and Change KPI's if needed to make sure people will work on what is really needed.
- Before showing the fact finding piece to the users, make sure they understand what you are going to present, if not; educate in advance!

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