OREGON FREEZE DRY

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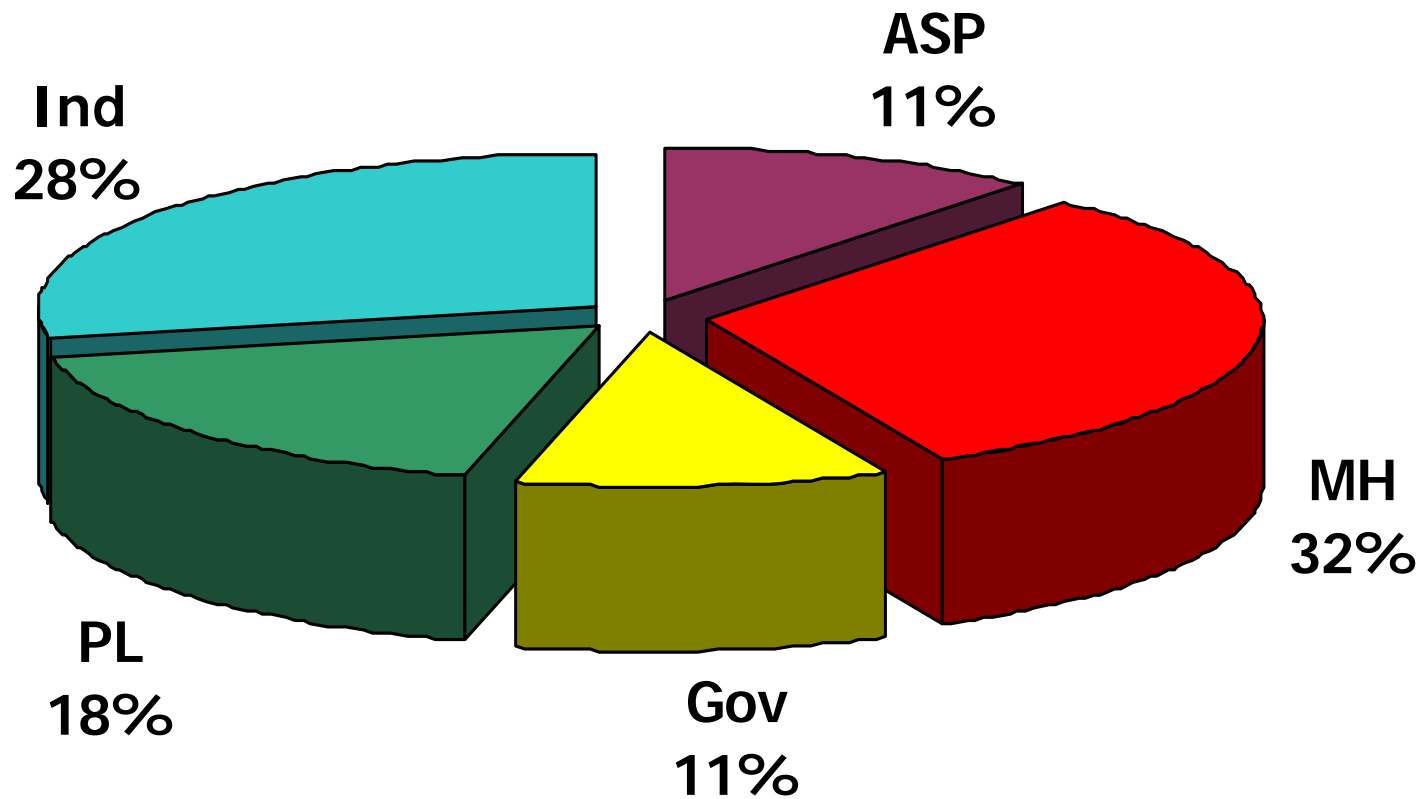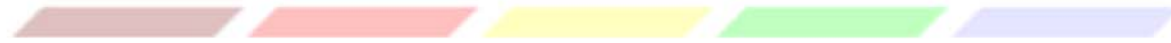
Oregon Freeze Dry

Largest custom freeze dryer in the world

Celebrating 50th anniversary in 2013

5 diverse market segments

- Ingredients
- Packaged Products
    - OFD Brands
    - Private Label
    - Government
- Specialty/Non-Food Items

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2011 Sales by Market

ASP
11%

Ind
28%

MH
32%

PL
18%

Gov
11%

Replenishment History

1997: Started applying Replenishment principles using MS Excel, 99.9% on-time with −60% inventory.

1999 - 2009: Experimented with other market segments and customers.

2007: Implemented Replenishment+ for purchased parts. Static levels, no buffer profiles.

2011: Custom buffer profiles, closer integration between Planning and Purchasing

2012: DDMRP

2007 – Replenishment+

Policy:

Daily meeting with CFO, Accounting and Purchasing

- Review POs generated previous day
- "Push back" on order size(s)

Challenge:

Work with suppliers of high $$ items

- ↓ lead times
- ↓ minimum order quantities

Result:

Raw material inventory ↓ ~30% in first year with no reduction in availability

2012 – Demand Driven MRP

5 Critical Components

1) Positioning Inventory

2) Determining Buffer Profiles and Levels

3) Dynamic Adjustments

4) Planning Based on Demand Pull

5) Monitoring and Execution

1) Positioning Inventory

Finished Goods

- MH Pouches (41 SKUs)
- MH #10 Cans (37 SKUs)

Intermediate Components (13 SKUs)

Purchased Items

- Raw Materials (162 SKUs)
- Packaging Materials (284 SKUs)

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2) Setting Up Buffer Profiles

Type

Make

Buy

Lead Time

1 - Short (49%)

2 - Medium (37%)

3 - Long (14%)

Variability

1 - Low (4%)

2 - Medium (67%)

3 - High (29%)

Min Order Qty

M (44%)

no M (56%)

Example: B23M

2) Calculating Buffer Levels

Average Daily Usage

- Average demand for parent item
  - History by item – 80%
  - Forecast by market – 20%
- Calculate down through BoM to child quantity
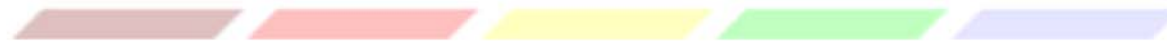- Aggregate to get child ADU
- Table for Deletes, Edits & Add-ons

Standard assumptions for Red, Yellow & Green Zone impact

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Simple, profound and fundamental changes for a more
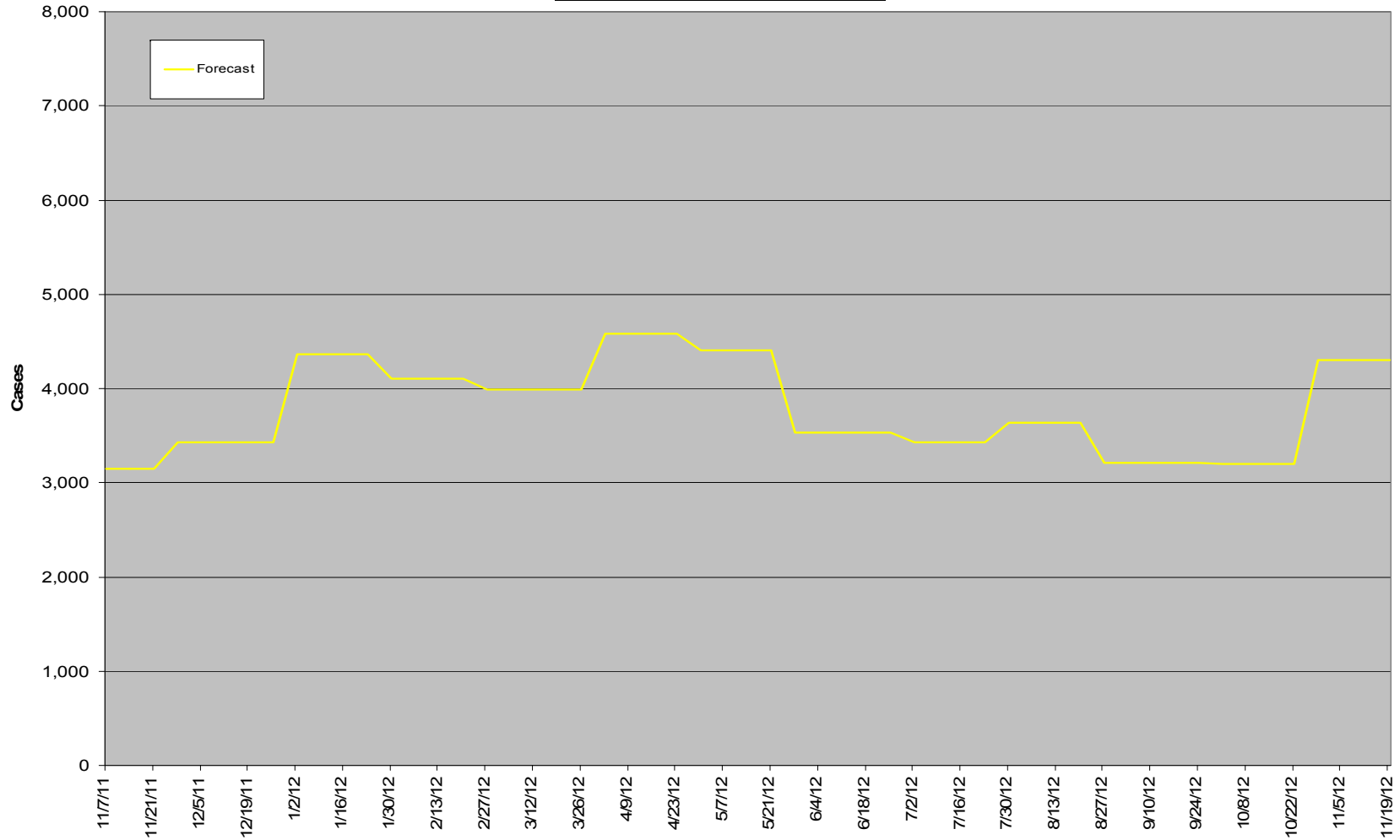volatile and complex global landscape

3) Dynamic Adjustments

- Monitor actual demand vs. ADU set point (in total)
  - Recent Trends
  - Seasonality
  - Input from dealer network

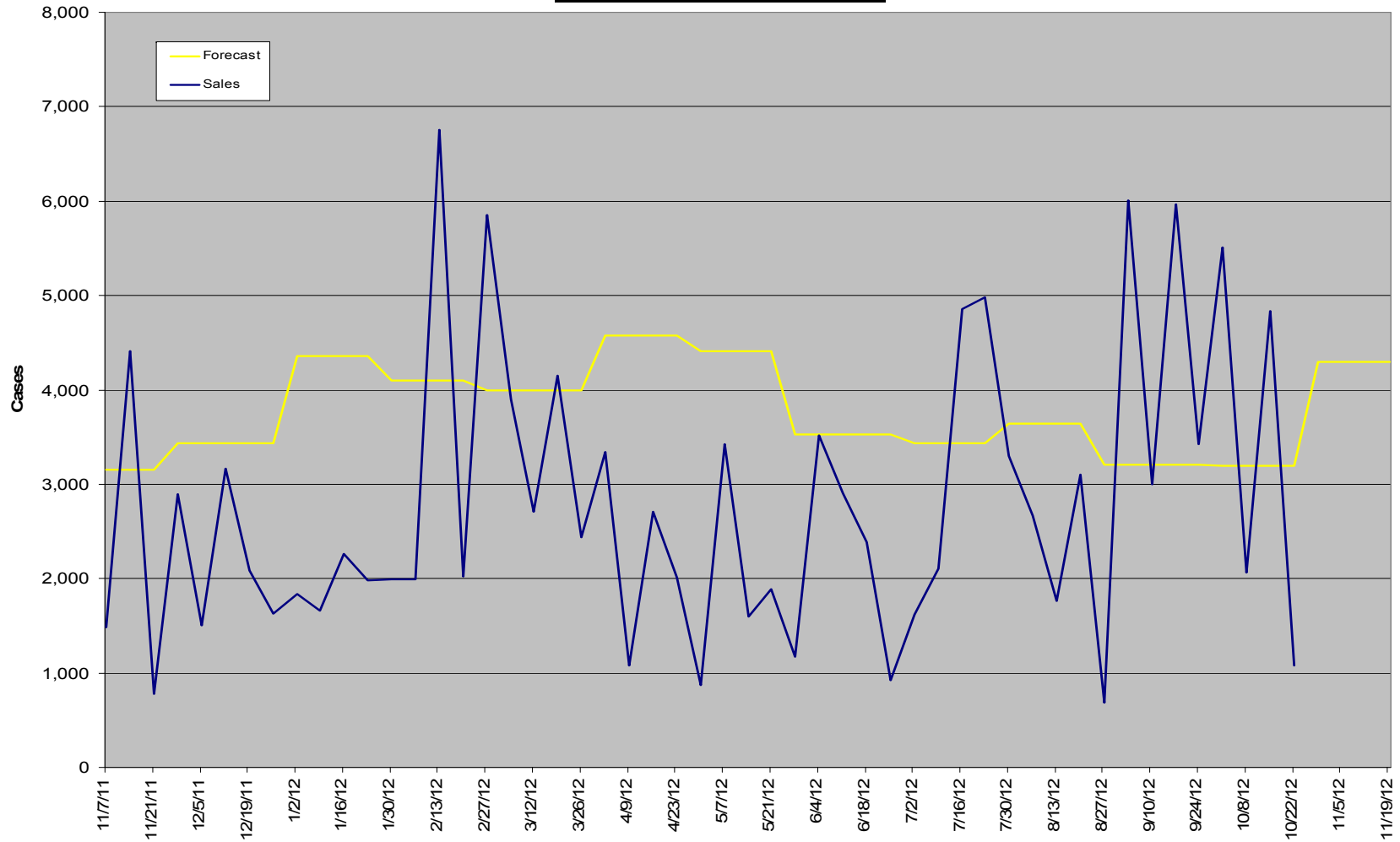- Display for visibility

- Move individual items if necessary

3) Dynamic Adjustments

Weekly MH Can History

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3) Dynamic Adjustments

Weekly MH Can History

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4) Planning Based on Demand Pull

MH #10 CAN FG INVENTORY BUFFERS
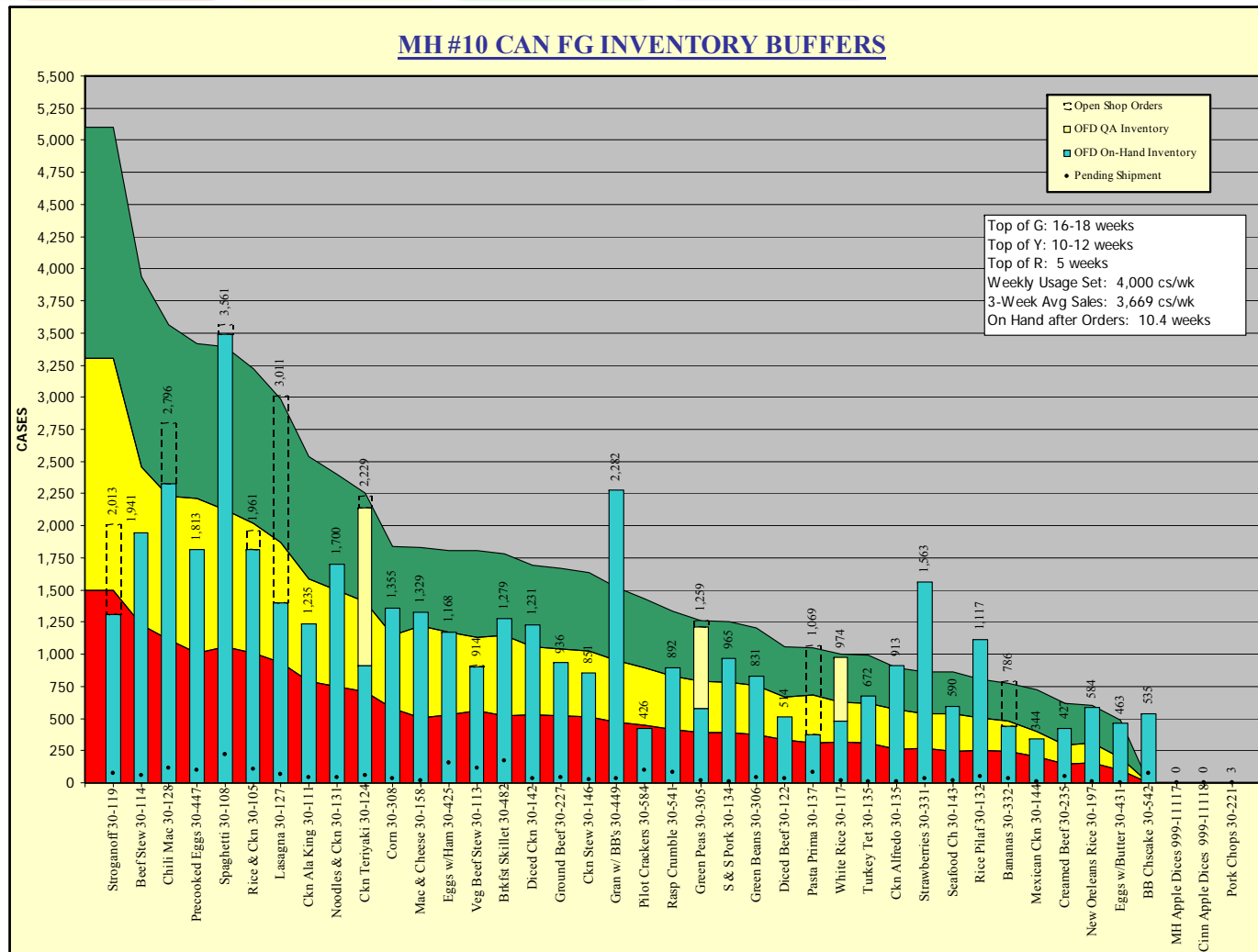
4) Planning Based on Demand Pull

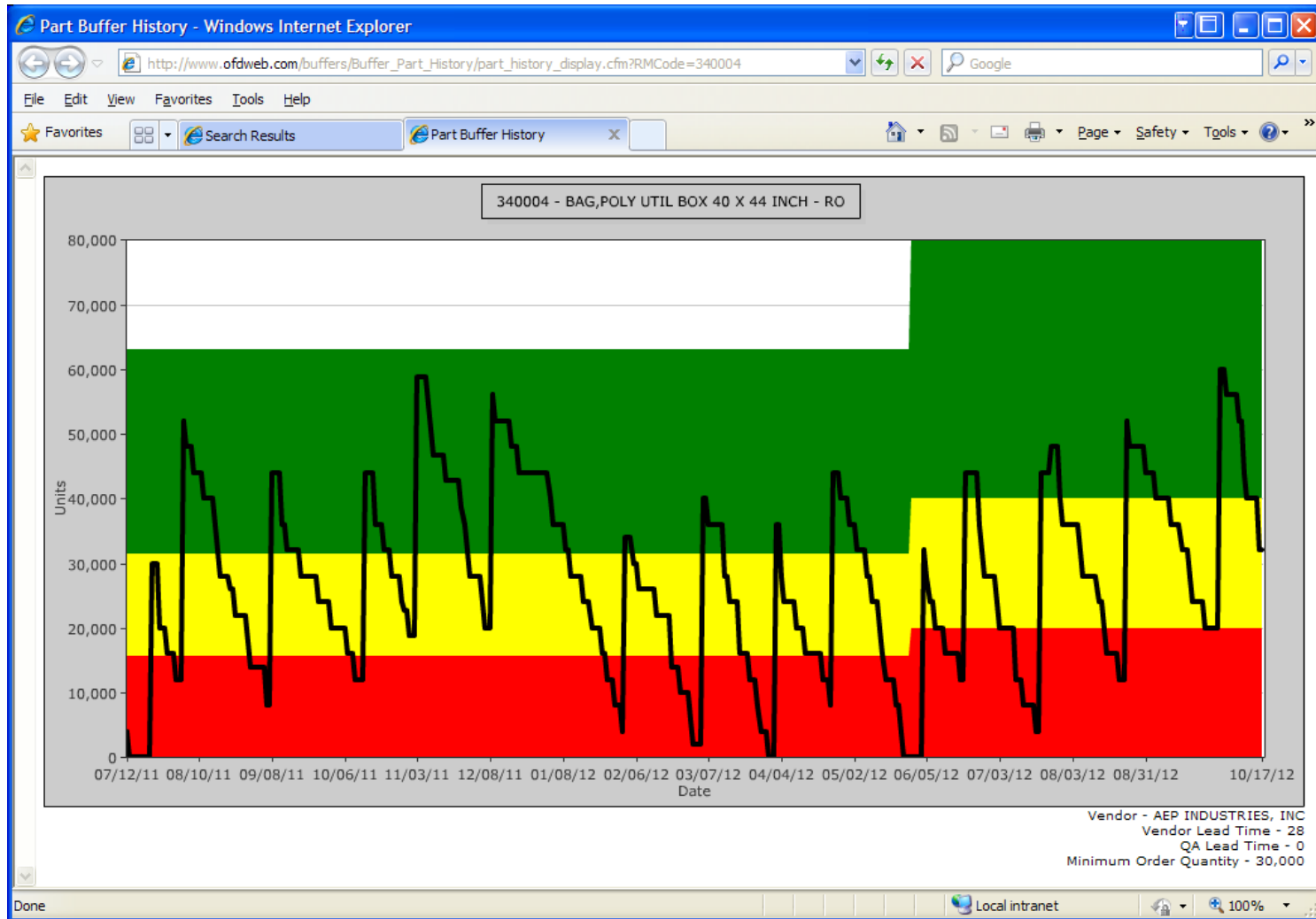| PRODUCT CODE	PRODUCT DESCRIPTION	OFD INV QA (CS)	OFD INV RELEASED (CS)	OPEN SOs (CS)	LX ORDERS (CS)	TOTAL AVAILABLE (CS)	TOP OF GREEN (CS)	TOP GREEN %	QTY TO PRODUCE (CS)	BUFFER RANK	CANLILNE TIME (HRS)
							% TOP OF GREEN TO PRODUCE:		100%		
0030584	MH Crackers	0	426	0	101	325	1,435	22.7%	1,110	1	35.2
0030119	MH Beef Stroganoff	0	1,313	700	71	1,942	5,103	38.1%	3,161	2	46.8
0030113	MH Veg Beef Stew	0	907	7	113	801	1,805	44.4%	1,004	3	12.4
0030122	MH Diced Beef	0	514	0	33	481	1,062	45.3%	581	4	7.2
0030144	MH Mex Rice & Ckn	0	344	0	10	334	726	46.0%	392	5	4.8
0030111	MH Chicken Ala King	0	1,235	0	40	1,195	2,537	47.1%	1,342	6	19.9
0030114	MH Beef Stew	0	1,941	0	56	1,885	3,934	47.9%	2,049	7	25.3
0030447	MH Preckd Eggs w/ Bacon	0	1,813	0	100	1,713	3,421	50.1%	1,708	8	25.3
0030146	MH Chicken Stew	0	851	0	22	829	1,639	50.6%	810	9	10.0
0030227	MH Cooked Ground Beef	0	936	0	38	898	1,670	53.8%	772	10	9.5
0030425	MH Eggs w/ Ham & Peppers	0	1,168	0	157	1,011	1,809	55.9%	798	11	11.8
0030105	MH Rice & Chicken	0	1,816	145	108	1,853	3,223	57.5%	1,370	12	16.9
0030541	MH Rasp Crumble	0	892	0	80	812	1,333	60.9%	521	13	7.2
0030235	MH Creamed Beef	0	427	0	51	376	616	61.0%	240	14	3.0
0030482	MH Breakfast Skillet	0	1,279	0	171	1,108	1,779	62.3%	671	15	11.5
0030306	MH Green Beans	0	831	0	43	788	1,206	65.3%	418	16	5.2
0030135	MH Turkey Tetrazzini	0	672	0	12	660	990	66.7%	330	17	4.1
0030143	MH Seafood Chowder	0	590	0	15	575	860	66.8%	285	18	3.5
0030131	MH Noodles & Chicken	0	1,700	0	40	1,660	2,398	69.2%	738	19	10.9
0030142	MH Diced Chicken	0	1,231	0	29	1,202	1,689	71.2%	487	20	6.8
0030308	MH Corn	0	1,355	0	33	1,322	1,841	71.8%	519	21	7.2
0030158	MH Mac & Cheese	0	1,329	0	15	1,314	1,829	71.9%	515	22	6.4
0030128	MH Chili Mac w/ Beef	0	2,327	469	116	2,680	3,567	75.1%	887	23	10.9
0030134	MH Sweet & Sour Pork	0	965	0	10	955	1,255	76.1%	300	24	3.7
0030137	MH Pasta Primavera	0	377	692	79	990	1,051	94.2%	61	25	0.9

5) Monitoring and Execution

Daily Meeting

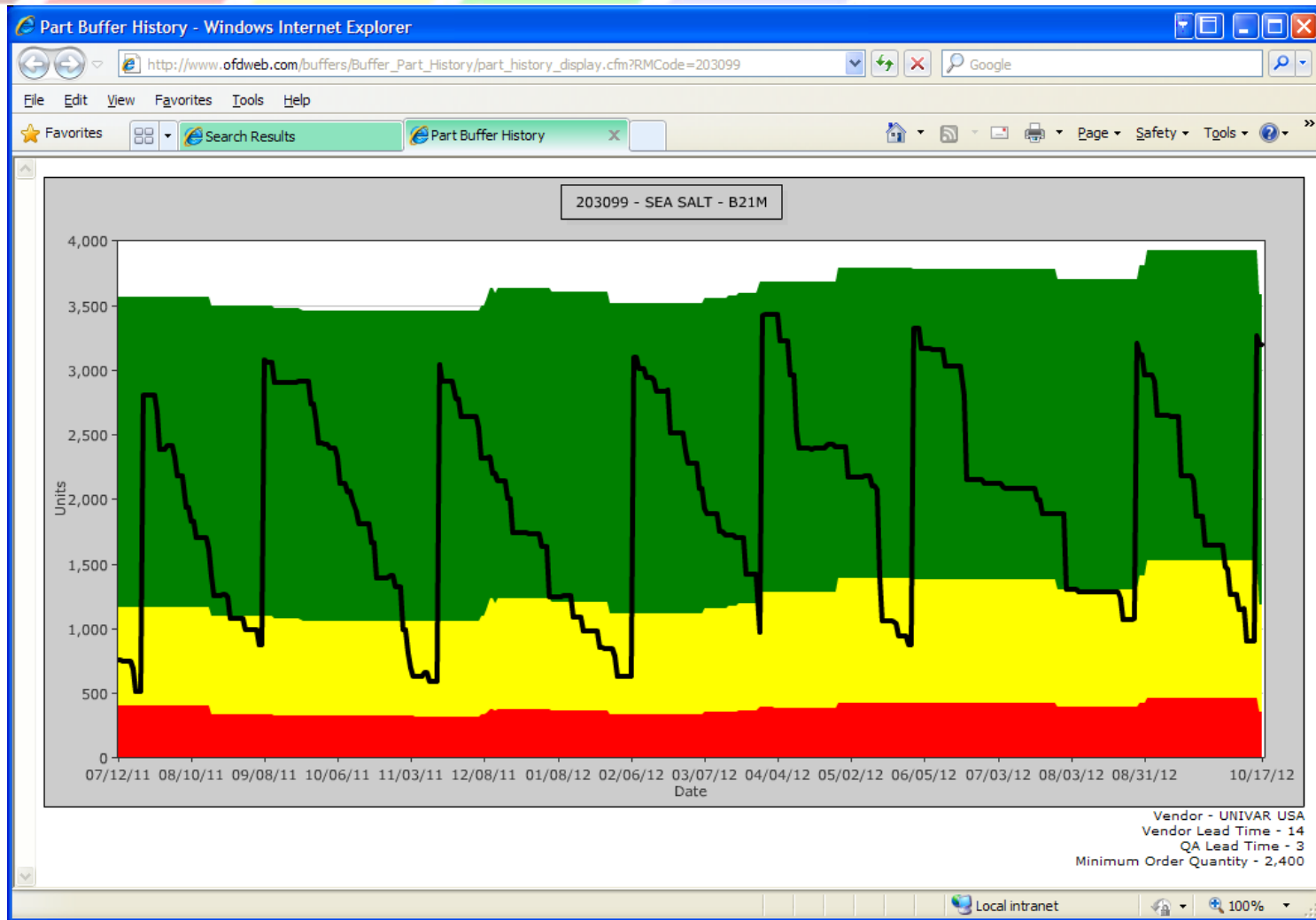## Planning, Purchasing, CFO, VP Finance

- Materials Synchronization
- Replenishment Planner
- Order Management
- Past Due POs
- Deal with exceptions
- Watch for trends

5) Monitoring and Execution

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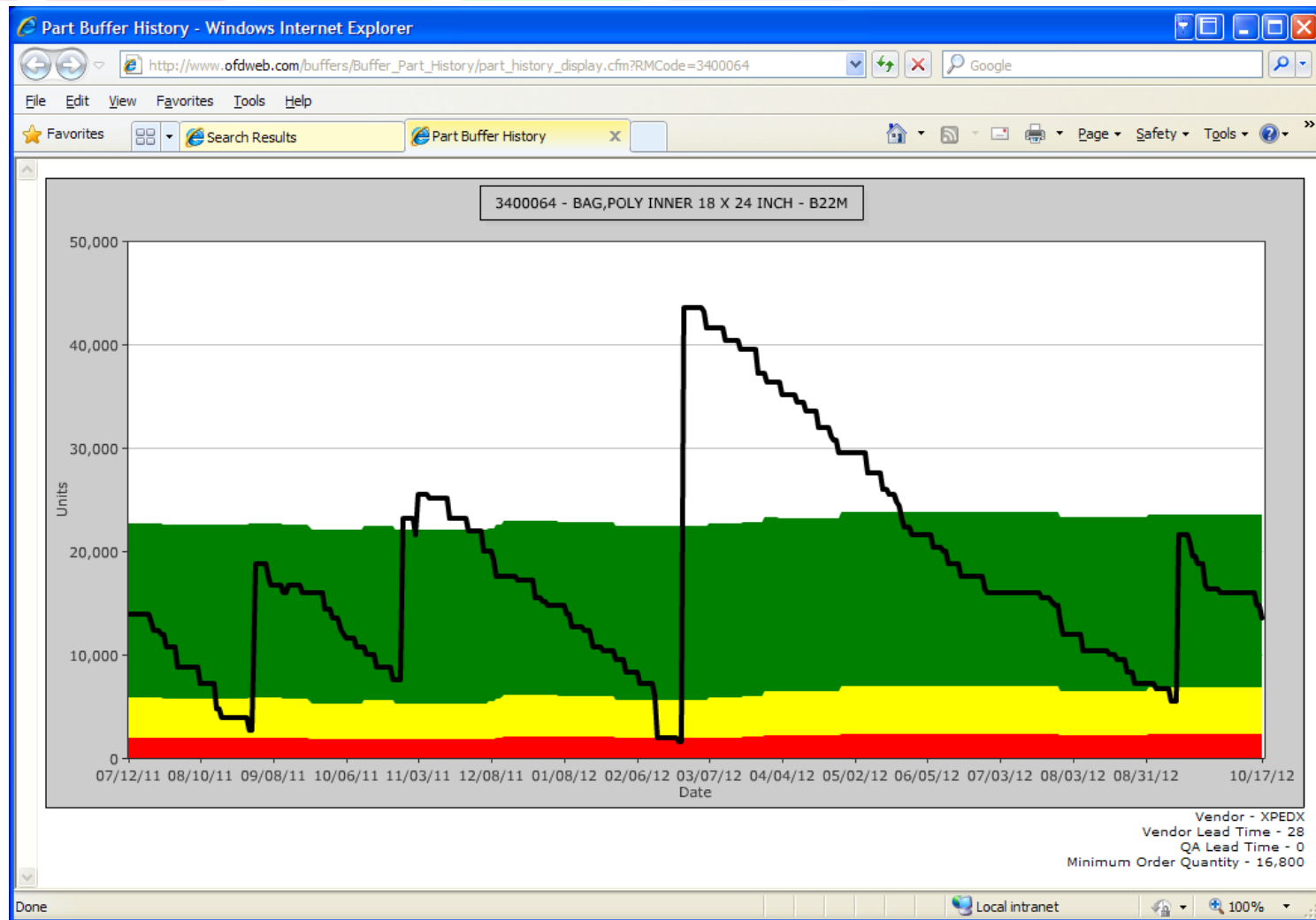
Lessons Learned

- Integrate with both Planning and Purchasing

  - Eliminate side systems

  - Single source for information

- Automate method for maintaining levels

- Regular monitoring is crucial

  - Reacting to changes

  - Ongoing improvement

- Good visibility makes monitoring easy

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