Supply Chain Transformation at Rayonier AM with SAP Integrated Business Planning

June 24th, 2020
KEY OUTCOMES AND OBJECTIVES

- Review the benefits and process improvements realized by Rayonier from the IBP S&OP and Supply implementation
  - Consolidate planning of all plants and geographical locations into a single improved application and process (1-S&OP)
- Review Innovative Solution architecture: Interim architecture of SAP IBP integrated with existing landscape and end-state S/4HANA integration with minimal throwaways.
- Show how SAP IBP was a useful evaluative and response tool to address the impacts of the disruptions and uncertainties
- Review Mill Industry-specific features in SAP IBP
- Discuss SAP IBP enabled improved visibility and collaboration across all the stakeholders
AGENDA

1. INTRODUCTIONS
   - Team and Rayonier introductions

2. CASE FOR TRANSFORMATION
   - Problem Statement and Goals

3. IBP ENGAGEMENT DETAILS
   - Scope, Timelines, Process Functionality delivered

4. BENEFITS AND LESSONS LEARNT
   - Business Benefits and Lessons Learnt

5. ABOUT MSCG
   - SAP IBP Capabilities and Key Offerings

6. Q&A
   - Q&A and Wrap-up
YOUR SPEAKERS TODAY

Ronald Ham

Ron is an SAP ERP Project Manager at Rayonier Advanced Materials.

He is responsible for systems and processes that include short and long range, planning and budgeting (SAP IBP) and Order to Cash (OTC) with a focus on the Manufacturing Execution System (MES) conversion process with quality and genealogy track and trace for all US pulp product generation.

Ron has 29 years experience in the Pulp and Paper Industry, working with multiple fortune 500 companies.

Sandeep Mondkar

Sandeep is a Delivery Partner for Digital Supply Chain Solutions at My Supply Chain Group LLC.

He has also deployed SAP SCM solutions in New Zealand, Australia, and Asia. Sandeep has in-depth SAP product knowledge, specifically in planning & scheduling, S/4HANA, IBP, and SAP APO.

Sandeep has over 20 years of supply chain experience in a variety of Industry Verticals including Pulp and Paper, Food & Beverage, etc.
# RAYONIER ADVANCED MATERIALS OVERVIEW

## Products

<table>
<thead>
<tr>
<th>High Purity Cellulose</th>
<th>Forest Products</th>
<th>Paper</th>
<th>Pulp</th>
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<tbody>
<tr>
<td>Dissolving Wood Pulp</td>
<td>Dimensional Lumber</td>
<td>Packaging</td>
<td>Mechanical Hardwood Pulp (Maple &amp; Aspen)</td>
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<tr>
<td>Acetate</td>
<td>Framing Materials</td>
<td>Multiply Coated Board</td>
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<tr>
<td>Ethers</td>
<td>Wood Chips</td>
<td>Newsprint</td>
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<tr>
<td>Specialties</td>
<td>Fuel (Chips, Sawdust, Shavings &amp; Bark)</td>
<td>Book Paper</td>
<td></td>
</tr>
<tr>
<td>Viscose</td>
<td></td>
<td></td>
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<tr>
<td>Fluff Pulp</td>
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## End Markets

- Global HQ
  - Jacksonville, FL
- Canadian HQ
  - Montreal, QC
- R&D Locations
  - US and France
- Manufacturing Facilities
  - 17 in the US, Canada and France
- Sales Offices
  - US, Canada, London, Tokyo and Shanghai
- Employees
  - 4,200

## Revenue by Product

- Newsprint: 6%
- Pulp: 5%
- Acetate: 21%
- Ethers: 15%
- Other CS: 15%
- High Purity: 11%
- Paper: 15%
- FP: 20%
- Pulp & Newsprint

Total Revenue: $1.8 billion
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   Q&A and Wrap-up
# CASE FOR CHANGE AND TRANSFORMATION

## Problem Statement

- Manual variance comparison between forecasts, production plan and budget
  - Excessive effort (data and time) to reconcile analyses between different business processes and time horizons
- Missing visibility on customer shortages arising out of supply chain constraints
- Missing ability to show forward looking, strategic sales and operations plan
- Legacy S&OP platform lacked abilities for end-to-end modeling and inability to provide a multi-level constrained plan
- Multiple systems and lack of integration (Lotus Notes, Cognos, SAP ECC, S/4HANA, Microsoft SQL, Excel)

## Goal

- Reduced costs from increased visibility and improved collaboration
- Facilitate a cross-departmental S&OP plan that balances inventory, service levels, and profitability
- Improved decision making with the aid of more accurate data and flexible reporting
- What if simulation to assess the impact of constraints, disruptions, and trade-offs
- Single cloud-based planning platform with easy integration with S/4HANA and other systems
- Consolidated planning into one improved application and process. This would eliminate myriad planning components
- Reduce data redundancy + move it closer to the source

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**Standardize – Simplify – Modernize – Integrate – Consolidate**

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# SAP IBP SCOPE & TIMELINE

## SCOPE

<table>
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<tr>
<th>PROCESS AND FUNCTIONAL</th>
<th>TECHNOLOGY</th>
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</table>
| • Sales and Operations Planning  
  • Strategic, tactical & operational plan  
  • Demand planning  
  • Production planning (IBP TS Optimizer)  
  • Inventory plan  
  • Reporting, variances and KPIs | SAP IBP modules:  
  • IBP S&OP  
  • IBP Response and Supply  
  • CPI integration |

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<tr>
<th>BUSINESS UNIT</th>
<th>CHANGE MANAGEMENT</th>
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| • Business unit: HP cellulose  
  • Location: US, Canada & France | • People and roles including process adaptation  
  • New platform/systems (cloud vs on-premise)  
  • Data requirements, integration and cleansing |

## TIMELINES

|----------------------|--------------------|---------------------|-------------------|-------------------|
| • Business case, software evaluation/POC of SAP IBP and other vendor products. | • Project kick off, hybrid agile methodology.  
  • Sprint 1 & 2, Build, test | • Delta build, training.  
  • Testing, Sprint 2 & 3 | • Test, build, UAT  
  • Sprint 3 & 4  
  • SOFT-Go live | • User adoption, global training  
  • Stabilization, parallel processing, CPI |
END STATE INTEGRATED ARCHITECTURE

- Solstice (MES) Manufacturing Execution System
- IMA Business Partner Portal
- Third Party Logistics EDI with 3PLs
- CQR Customer Quality Reporting
- Logistic partners Freight, customs, notify partners
RAYONIER S&OP PROCESS

**Actuals:**
- **Demand**
  - Open sales orders, shipments
- **Logistics**
  - Actual freight spend
- **Finance**
  - Shipment revenue
- **Production**
  - Actual production & schedule

**Process Input:**
- **Demand/Sales plan**
  - Who – CSR/Account team
  - What – forecast/volume/price
- **Logistics**
  - Who - Logistics team for domestic & export
  - What – Freight rate split by destination
- **Production Assumptions**
  - Who – Finance and operations
  - What- Production rates, downtime

**Process Output:**
- **Demand/sales plan**
  - Constrained demand aggregated by volume/family
- **Logistics –**
  - Freight spend estimates for domestic & export
  - Number of vehicle’s required, average freight cost/ton
- **Production plan:-**
  - Constrained production plan, asset utilization
  - Projected inventory plan (aggregated)
- **Finance**
  - Revenue aggregated by family/aggregated

**Variances/metrics:**
- Demand plan accuracy
- Produce to schedule
- Inventory vs budget
- Inventory end of month average (M/Q/Y)
- Inventory turns

**SOP**
Aggregate/Volume/Family

**Master Scheduling**
Detail/Product

Today

N=0  N=1  N=2  N=3  N=4  N=5  N=6

MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUNE
"By going to SAP IBP, for the first time we will be able to use one system to complete our strategic long-range plan, build next year's annual sales budget, and update our current year's forecast. Our operating and sales assumptions will be much more consistent now between the various time horizons, and we'll save a lot of time not having to reconcile differences between the different analyses whether prepared by a corporate analyst or a site-specific planner.”

- Rayonier AM SiOP Manager
IBP DEMAND AND SUPPLY CAPABILITIES DEPLOYED

**Demand**
- Demand plan at end-user and sales grade (VC characteristic of FG material)
  - Materials with class and characteristics
- Sales, volume and price reporting at grade level and disaggregate to all materials belonging to a sales grade
- Freight cost forecast based on customer volumes
- Container, transport forecast & price
- Forecast consumption at customer group and sales grade level
- Sales forecast variance reporting
- Aggregated view of revenues (plan vs actual)
- Simulation and what if abilities
- Alert and dashboards

**Supply**
- SAP IBP is ‘the planning tool’ for all horizons.
- Modelled min capacity utilization for dryer (constrained resource)
- Global inventory projection by grade (FG material) and in multiple UOMs
- Push production concept using TS optimization
- Pre-build scenarios
- Grade substitution – alternate products and alternate grades at alternate locations
- Grade transition, also called “Production wheel” to facilitate future state PP/DS block planning
- Simulation, scenario and what if abilities
- Alert and dashboards

Supply Chain Transformation at Rayonier Advanced Materials
IBP DASHBOARDS & METRICS

Supply Chain Transformation at Rayonier Advanced Materials
IBP IMPLEMENTATION: TECHNICAL SNAPSHOT

- 12+ Complex Customer hierarchy
- 3 Business roles views, alerts
- 20 Master Data types
- 12+ Dashboards and Analytics charts
- 3 Source systems
- 100 Attributes
- Production wheel developed
- Constraint Planning using TS optimizer
- 380 Key figures

Supply Chain Transformation at Rayonier Advanced Materials
SOLUTION ARCHITECTURE (INTERIM)

ROSS - Canada

SAP ECC - US

S/4 HANA - France

Mill Systems

One stream

Integrated Business Planning

Process Input:
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SAP IBP LESSONS LEARNT & CRITICAL SUCCESS FACTORS

- Start simple and add requirements, data scope based on sprint plan, requirement matrix
- Prioritise business requirements and align with business goals
  - i.e. classify requirements by Must → should → could → would.
- Future proof solution design (especially for cloud solutions) for minimal throwaways, especially for data design and integration
- Don’t over solution and leverage on standard key figures, apps
- Leverage on standard RDS, MSCG templates for data load and engage with the right people
- Focus on the agreed scope (i.e. requirement matrix) for every sprint
- Agile methodology with experienced team for faster solution deployment
  - *spend time on building solution, training users than blueprinting solutions*
  - shorten time to value and reduce cost of the project
  - reduce risk due to incremental approach
- Small but focused teams for efficient project delivery and better outcomes for remote project delivery
KEY BENEFITS OF IBP AT RAYONIER

• Consolidated the SOP Business Planning Process on High Purity for:
  – USA, France and Canada
• Sales, Freight and Planning Data is entered in SAP IBP improved accuracy and process integration
• One consolidated plan to Finance for their use in reporting
• Dashboards with slice & dice capability provide timely and accurate view for Senior Leadership, Mill leadership and those interacting with IBP
• Reduction in overall time required to prep for meetings and then react to changes
• Real time what-if scenario planning capabilities and collaboration platform
• Quick win for business as implementation timelines (i.e. 24 weeks ) is much less shortened time to value and reduce cost
• What-if capabilities enable ‘trust but verify’ concept with excel UI improved user adoption

Standardize – Simplify – Modernize – Integrate – Consolidate
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MSCG SNAPSHOT

Innovative solutions in Supply Chain Strategy, Business Processes and Applications Integration

- Founded in 2008
- Offices in Australia, US, Canada, Mexico, India
- 60+ clients
- 160+ Supply Chain Consultants

Services Offered
- Supply Chain Strategy & Roadmaps
- Business Process Optimization
- Diagnostics and Audits
- Implementations & Rollouts
- Application Maintenance Support (AMS)

Industry Expertise
- CPG, Food/Beverage, Wholesale Dist.
- Mill Products
- Oil & Gas, Chemicals
- Life Sciences, Pharma, Bio Med
- AFS
- Manufacturing, High Tech, A&D

Key SAP Solution Areas
- Supply Chain Planning (SCP)
  - SAP SCM: IBP, APO
  - SAP S/4HANA PPDS, AATP
- Supply Chain Execution (SCE)
  - SAP S/4HANA embedded and core EWM, YL, TM

Why MSCG
- Seasoned and hands-on leadership
- High quality & cost-effective solutions
- Industry experts, thought leaders,
- Best practices approach
- SAP focus
- Value maximization/risk minimization

Founded in 2008
Offices in Australia, US, Canada, Mexico, India
60+ clients
160+ Supply Chain Consultants
MSCG AMPLIFY OFFERING SNAPSHOT

Quick hit S&OP solution to bridge the gap to best in class

Business Processes

- Demand Planning
  - Gather & cleanse historical data
  - Basic statistical forecasting
  - Demand planner override
- Supply Planning
  - Time series heuristics to facilitate distribution, inventory, production & procurement planning processes
- Sales & Operations Planning
  - Monthly SIOP process orchestration
  - On the fly what-if analysis

Business Benefits

- Agile response to rapid changes in supply network, demand, and supply plan
- Enablement, visualization & tracking of S&OP processes & activities
- Visibility to critical KPIs and track performance
- Improved forecast accuracy and service levels
- Visibility of end-to-end digital supply chain With data views & dashboards

Targets

- Customers facing disruptions in demand and supply
  - Customers who currently use spreadsheets for planning and have outgrown it
  - Customers using SAP ECC MRP or S/4HANA MRP and are looking for planning improvements
  - Customers with non-SAP ERP solutions and evaluating SAP
  - Customers with SAP APO but are light users of it

Terms

- Amplify Go Live in 90 days with standard SAP IBP functionality
- Limited complimentary capabilities can include custom planning views, dashboards & alerts
- MSCG pre-configured content is included
- SAP CPI Integration (flat file integration)

MSCG Jumpstart IBP offering

- IBP Jumpstart Lite (specific business process) - Deployed in 90 days
- IBP Jumpstart Plus (S&OP with flexible scope and light configuration) – Deployed in 90+ days
- IBP Jumpstart Pro (S&OP with flexible scope and automated integration with ERP) – Deployed in 120+ days

Supply Chain Transformation at Rayonier Advanced Materials
**MSCG SCP OVERVIEW**

### SAP SCM CAPABILITIES
- Multiple IBP (10+), S/4HANA (4+), APO (40+) Go Lives
- Leader in integration of SAP IBP with SAP and non-SAP legacy systems (JDE, Microsoft ...) – can accelerate client’s IBP journey now even if S/4 is slated for the future
- Mill Products expertise including MES Integration, Trim Optimization
- Leaders in trim integration, S/4HANA to MES systems (Greycon, GE Proficy, ABB Autoprod, etc.)
- CPG, Food, Chemical, Mill Products, etc. Industry templates for SAP IBP, S/4HANA, APO
- Focus on the underlying business process

### PARTNERSHIPS
- SAP Partner for Presales, Service and Delivery
- Net New and Dormant account penetration strategies
- References
- Key IBP partner for SIs
- Customers & Case Studies available.
- Pre-sales Support

### HOW WE HELP
- Strategy, Roadmap and Assessments
- IBP and S/4HANA Jumpstarts
- Business Process Optimization
- Solution Design
- Implementations
- Support and AMS (flexible models)
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Q&A

For questions after this session, contact at

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<th>Sandeep Mondkar</th>
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<td>Partner, SCP</td>
</tr>
<tr>
<td>My Supply Chain Group, LLC</td>
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Thank You

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