

BRISTLECONE

SOLUTION OFFERING: CPG INDUSTRY



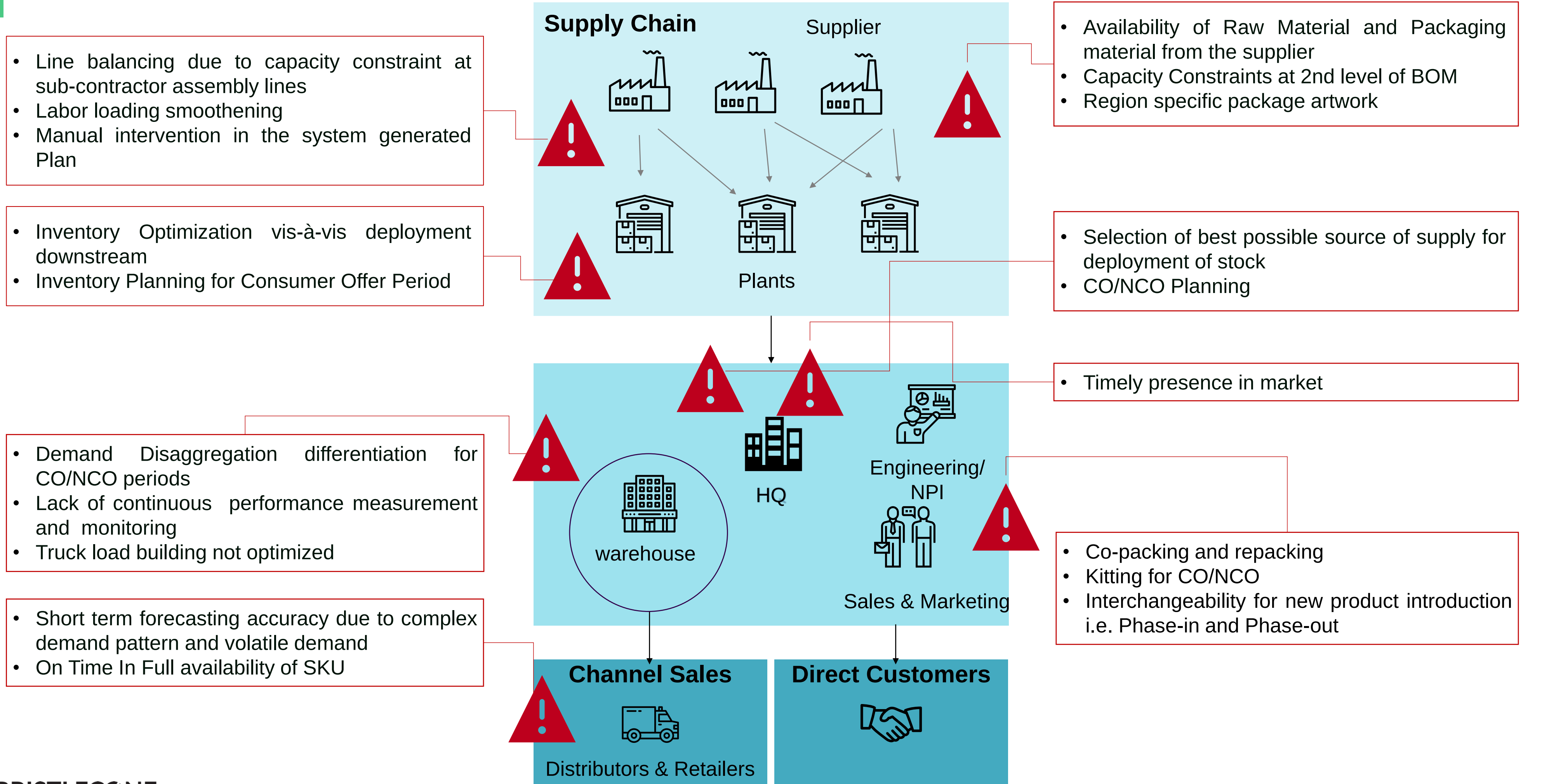
AGENDA

1. CPG INDUSTRY OVERVIEW
2. CPG SAP PLANNING OFFERINGS



CPG INDUSTRY OVERVIEW

CPG INDUSTRY CHALLENGES



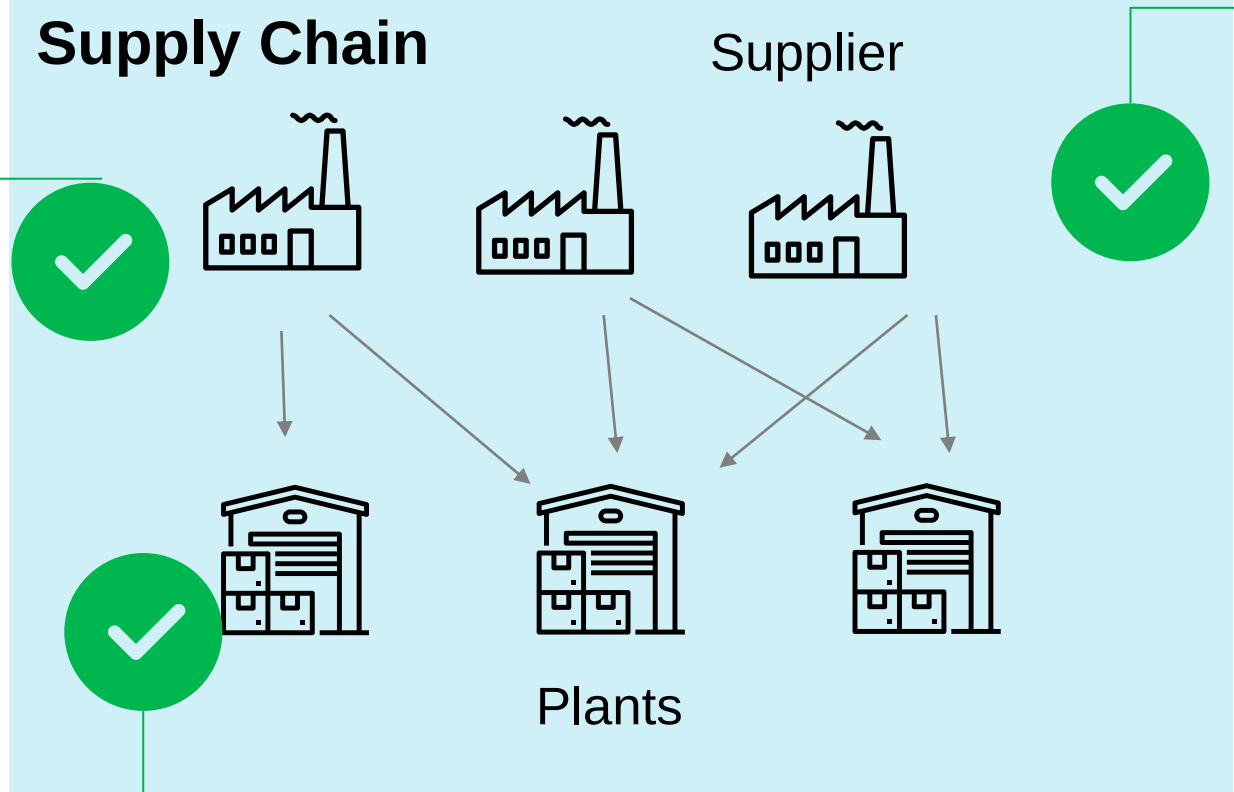
CPG INDUSTRY BEST PRACTICES

- Cost based optimization of production for maximum utilization of resources and minimize demand loss

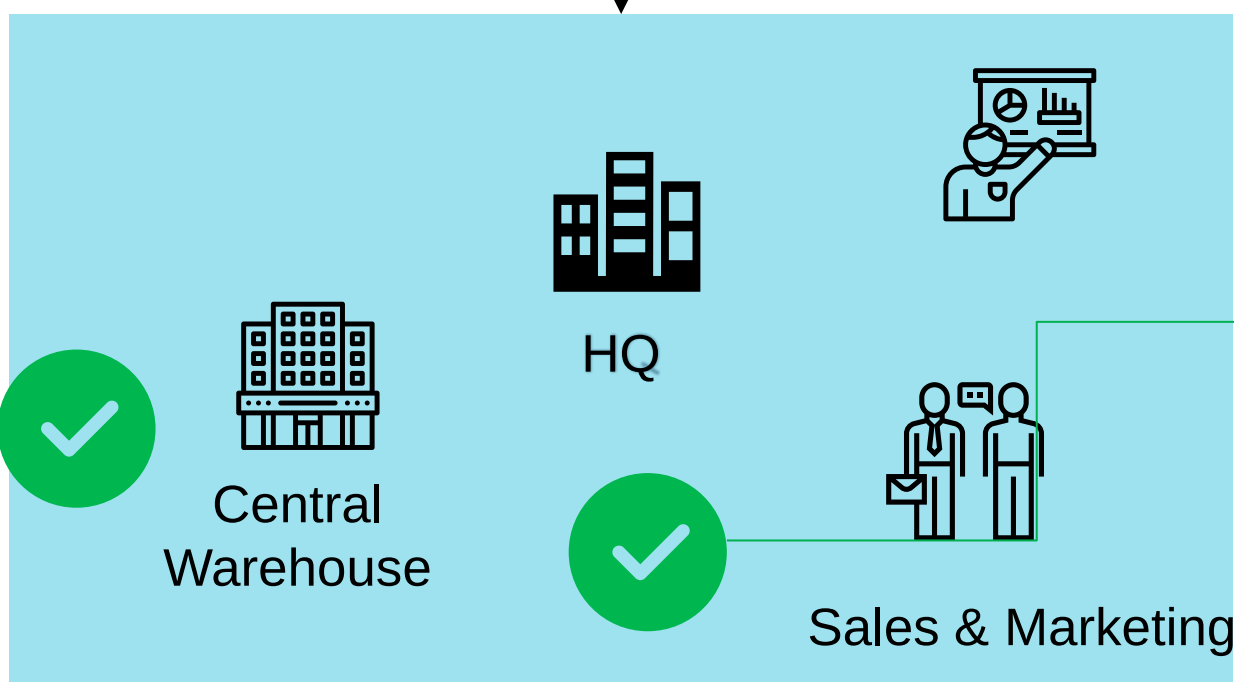
- Improved replenishment lead time
- Increased responsiveness to changes
- Reduction in inventory

- Cost optimized distribution network to reduce the overall supply planning cost and maximize on shelf availability.

- Consensus Demand Planning
- Like Modeling for new product introductions
- Sales & Operations Planning Process

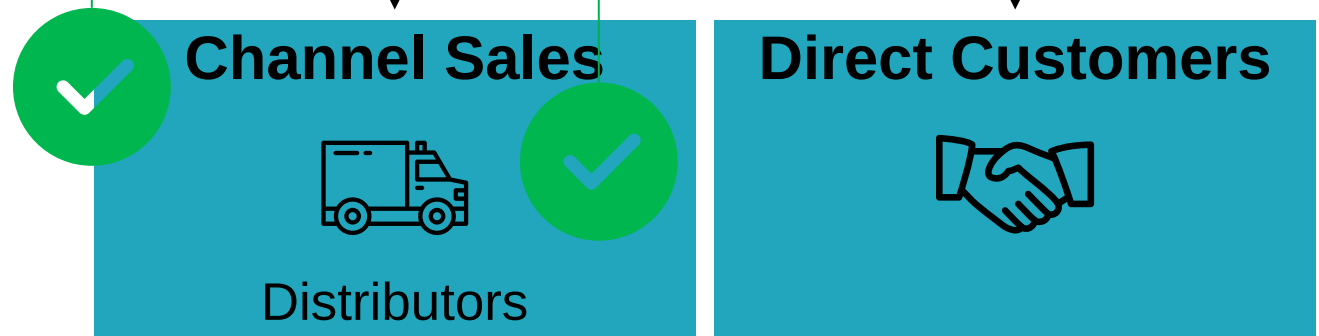


- Integration with Suppliers and Contract Manufactures providing visibility for RM & PM planning.

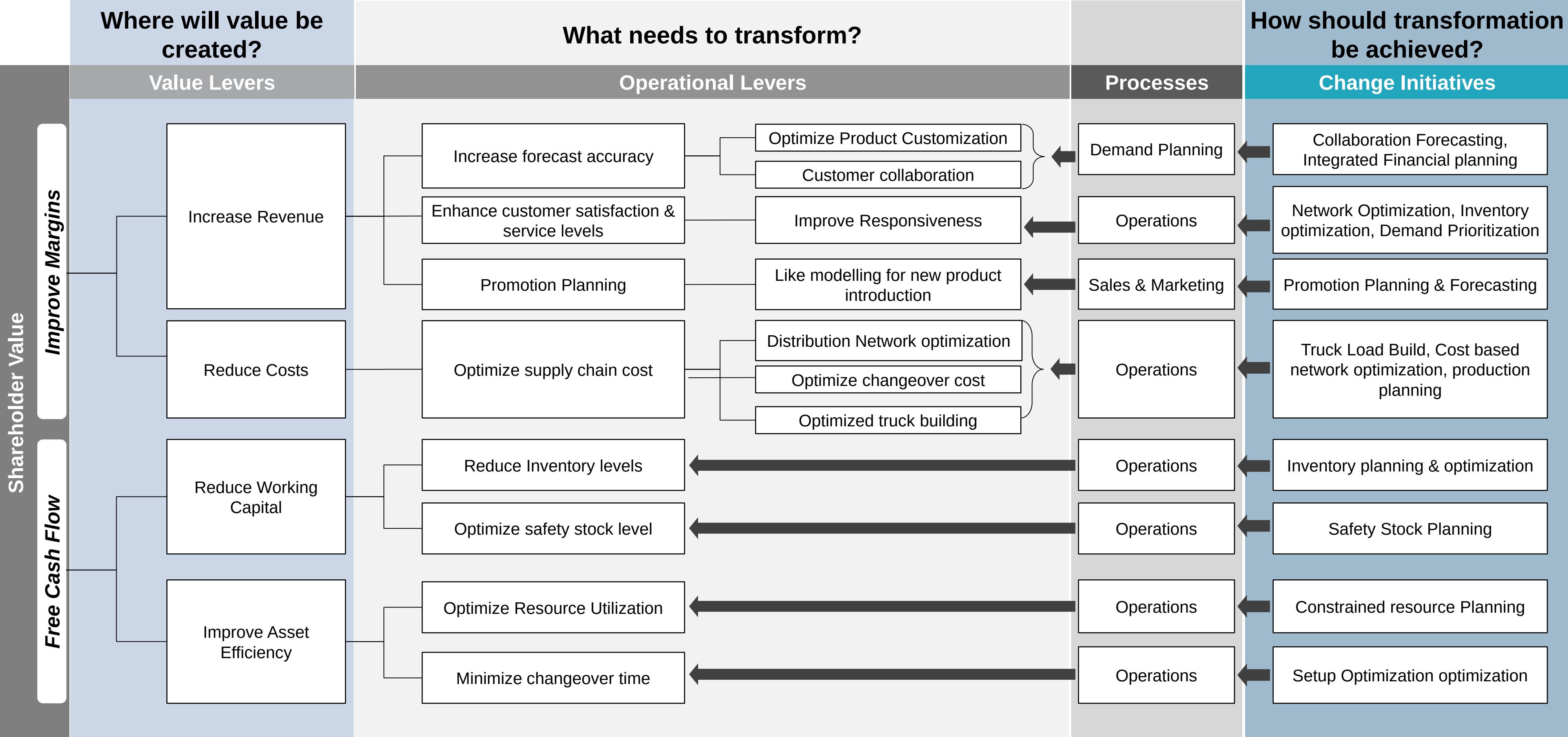


- Optimized truck load building to minimize logistic cost and reduce carbon footprint

- Increased Forecast Accuracy
- Demand Supply Synchronization
- Increased Customer service level



CPG SUPPLY CHAIN VALUE MAP



BRISTLECONE SAP PLANNING OFFERINGS

REVOLUTIONIZING SUPPLY CHAIN PLANNING IN CPG

Best in Class Solutions to tackle the VUCA (Volatility, Uncertainty, Complexity & Ambiguity) world

33%

Supply Chain digitalization and upgradation to support new revenue streams like Direct to Customer

95%

Building Supply Chain resilience to achieve strategic Objectives

75%

External Factor inclusion in predicting Demands

60%

Strategic Structural Cost Transformation to fund future growth opportunities

Strategic Supply Chain Priorities for CPG Organizations

SNo

Planning Challenges

Use Cases

1

Frequent structural changes in supply chain due to M&A , Pandemic, Change in Sale Channel & Territory

AI/ML based intelligent demand Planning
Global Harmonization of SI&OP

2

Competition from multiple global and local players- Custom Local Offering & Private Labels

Strategic Top-down target planning based on market share ,sales, promotion & budget

3

Seasonal nature of business leading to new product launch, consumer offers/promotion

Parent-Child SKU relationship, Kitting, price sensitivity analysis, product Life cycle management based on similar products

4

Need of accurate forecast at granular level(sales channel ,POS) to maximize secondary sales at stores

Enhanced short term forecasting based on pattern recognition. Demand sensing. Ladder Planning to refine inventory positioning

5

Multi-Demand streams leading to negative Forecast add value

AI/ML based automated consensus planning using forecast value add analysis & lag analysis data

6

Root cause analysis in supply chain with Large no of SKU in a complex multi-layer distribution network

Supply Chain visibility & control Tower featuring visualization & Drilldown

7

High pressure on reducing supply chain cost without impacting service level

Intelligent demand sensing for proactive inventory Management . Wholistic Inventory framework. Shelf-Life Planning

8

Data Driven decision making based on financial simulation

Scenario Planning & what if analysis. Capability to simulate up to gross margin level through connected financial planning

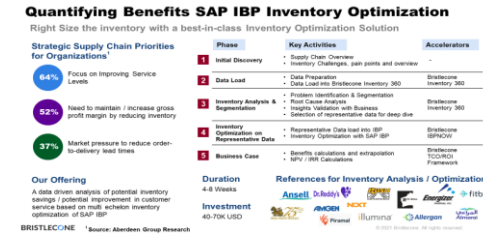
COMPREHENSIVE DEMONSTRATED OFFERINGS FOR CPG

Supply Chain Diagnostics & Process Design

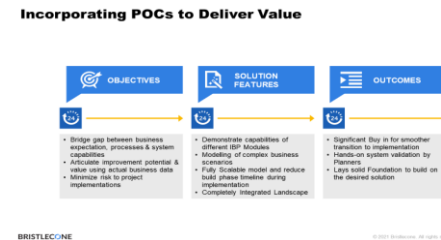
Robust framework to diagnose Supply Chain Health



Inventory Analysis for Quantifying Benefits SAP IBP IO

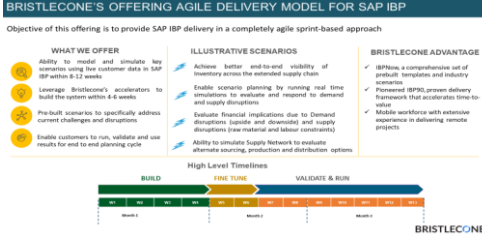


Rapid prototyping, POC's & Hands on Experience in Bristlecone Instance



Seamless Supply Chain Transformation Delivery

Completely agile sprint-based model for flexibility & responsiveness



Rapid deployment of Minimum viable CPG Industry Solution with IBP 80 / 90

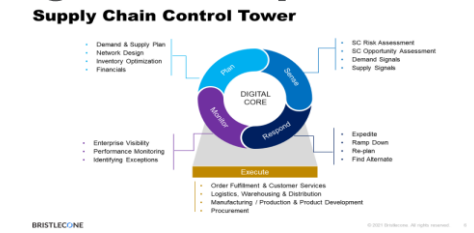


Comprehensive supply chain transformation using IBP NOW for CPG

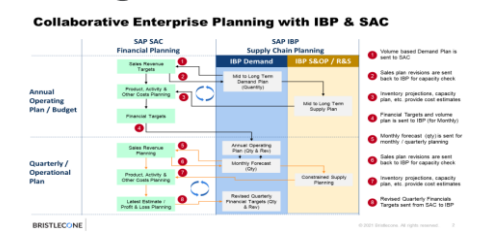


Sustenance & Continuous Innovation making planning more efficient

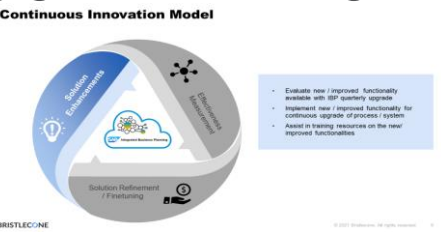
Enabling Control Towers for External Sensing & Enterprise Visibility



Collaborative Enterprise Planning for gross margin & P&L simulations



Continuous Innovation Model for leveraging global learnings & upgrades



Other Offerings

PPDSNOW

AATPNOW

Network Optimization

Our CPG Expertise

200⁺
CPG Planning Engagements Completed

95%
CPG Client Satisfaction Score

100⁺
CPG Preconfigured Scenarios

20⁺
IBP Go-Lives for CPG Industry

20⁺
CPG Industry Subject Matter Experts

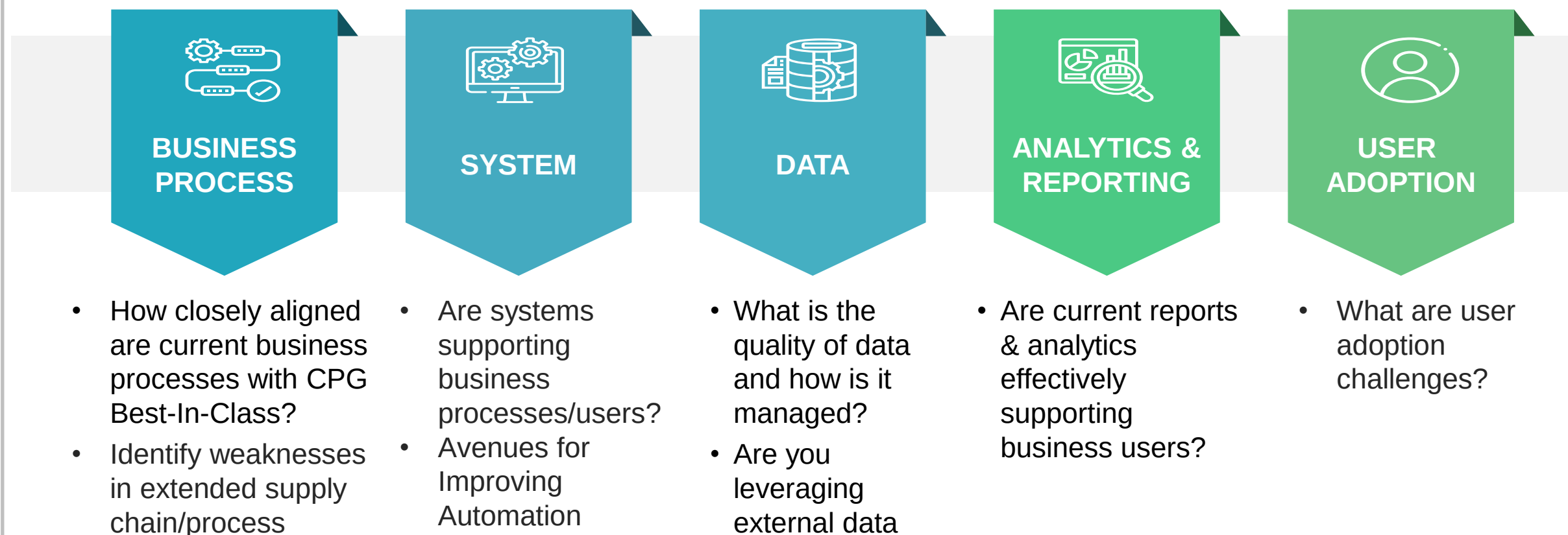
100⁺
Assets facilitating Training and Adoption

#1 – DIAGNOSTIC FRAMEWORK

Business Requirement

Lack of a comprehensive framework across process, system, data, analytics and users for root cause analysis to enable supply chain transformation decisions for CPG Industry

Offering Features



Benefits / Deliverables

1. Roadmap transformation recommendation based on wholistic CPG perspective
2. Business Case Preparation
3. Process comparison with leading CPG industry best practices
4. Unbiased perspective on planning challenges faced with guidance from CPG SME's
5. Ideal Tool Selection for Supply Chain Planning

Illustrative Case Study

Globally Leading F&B

Business Objectives

- Improve forecast accuracy
- Reduce planning process time & effort

Bristlecone Solution

- Differentiated forecasting based on segmentation
- Setting up a centralized demand planning COE for automation & shared services structure to set up robust planning processes

Benefits Achieved

- Global process harmonization inclusive of local best practices
- 20% reduction in planning FTE by setting up a COE

Key Highlights

30⁺
CPG Diagnostics Engagements Completed

50⁺
Benchmark CPG Processes, Mind Maps & other assets

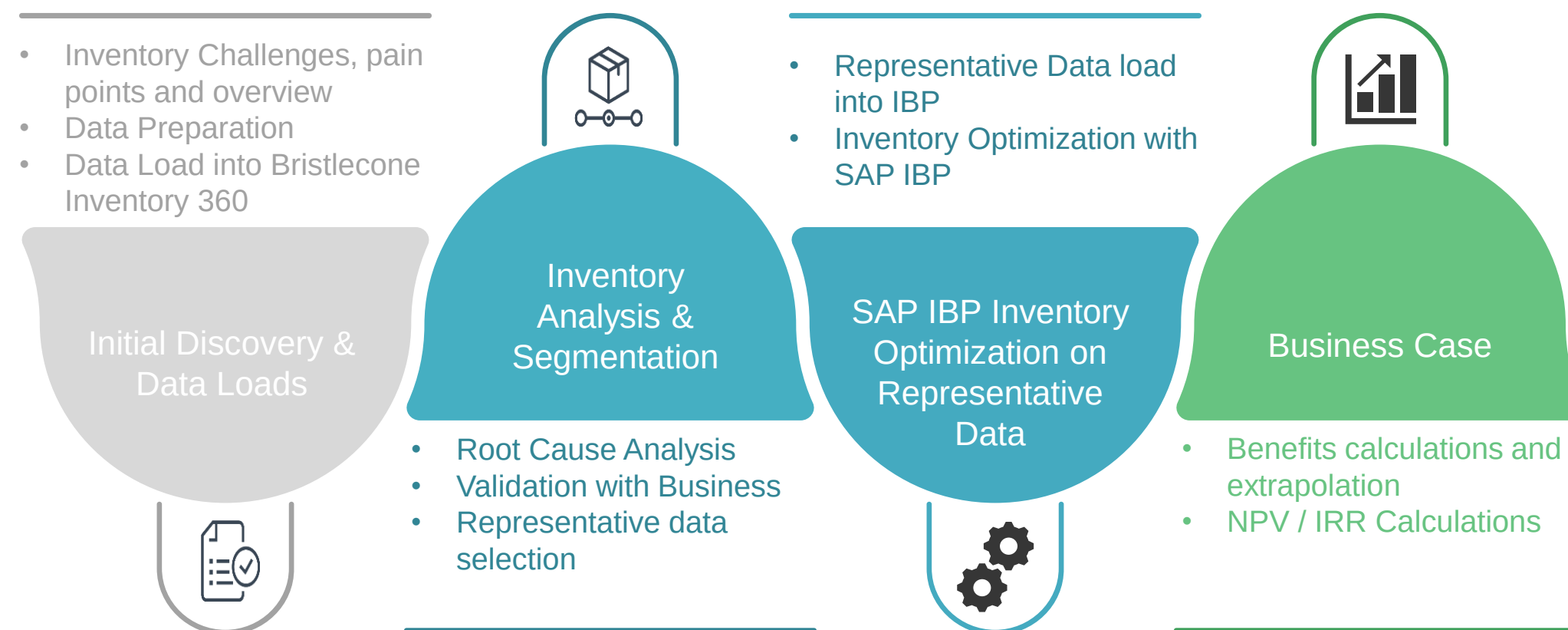
20⁺
CPG Industry Subject Matter Experts

#2 – INVENTORY ANALYSIS FOR CPG

Business Requirement

Lack of accurate quantifiable insights into potential inventory savings by use of multi echelon inventory optimization tool to enable a comprehensive business case.

Offering Features



Benefits / Deliverables

1. Onetime root cause analysis to identify root cause of excess inventory
2. Quantitative validation of root cause identified using representative data
3. Business case for investment into multi echelon inventory optimization in SAP IBP
4. Identification of prerequisites & supply chain transformation roadmap recommendations

Illustrative Case Study

Global Pharma & CPG Firm

Business Objectives

- No quantitative insight into potential for reducing inventory
- Lack of user trust in multi echelon inventory optimization

Bristlecone Solution

- Selection of representative data including mix of products with different strategies
- SAP IBP Inventory optimization enabled business case

Benefits Achieved

- 8 million USD inventory saving possibility identified
- Hands on user involvement leading to increase in user trust

Key Highlights

5+
Inventory Analysis exercise with CPG Customers

30+
Preconfigured KPI's in Inventory 360 IP for CPG Industry

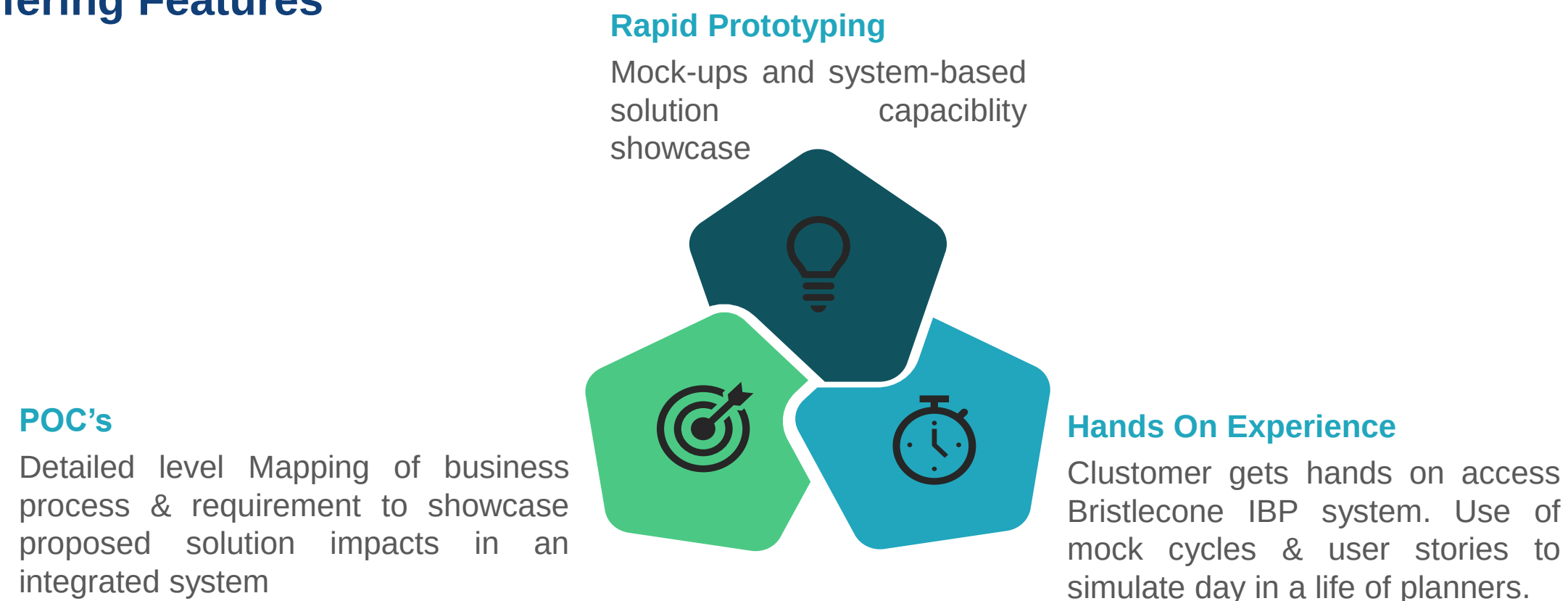
100+
Preconfigured IBPNOW scenarios for rapid IBP build

#3 – PROTOTYPING, POC'S & HAND'S ON EXPERIENCE

Business Requirement

Lack of trial options before purchasing licensees of Planning tool to try out the capabilities and fitment match with business requirement

Offering Features



Benefits

1. Fully Scalable model for prototypes to reduce design & build time during implementation
2. Hands-on system validation by Planners
3. Lays solid Foundation to build on the desired solution
4. Articulate improvement potential & value using actual business data
5. Minimize risk to project implementations

Illustrative Case Study

Global Dispensing
system Manufacturer

Business Objectives

- Improve user confidence on IBP solution
- Detailed comparison of features between IBP & APO

Bristlecone Solution

- POC with custom requirement was build in IBP
- System access to users to try hands on the capabilities
- Multiple simulated planning cycles executed

Benefits Achieved

- Cross department agreement on migration from APO to IBP
- Clarity on transition roadmap based on POC experience

Key Highlights

50⁺

IBP Proof of
Concepts
conducted for
CPG Industry

100⁺

Preconfigured
assets to
accelerate PoC
build

97%

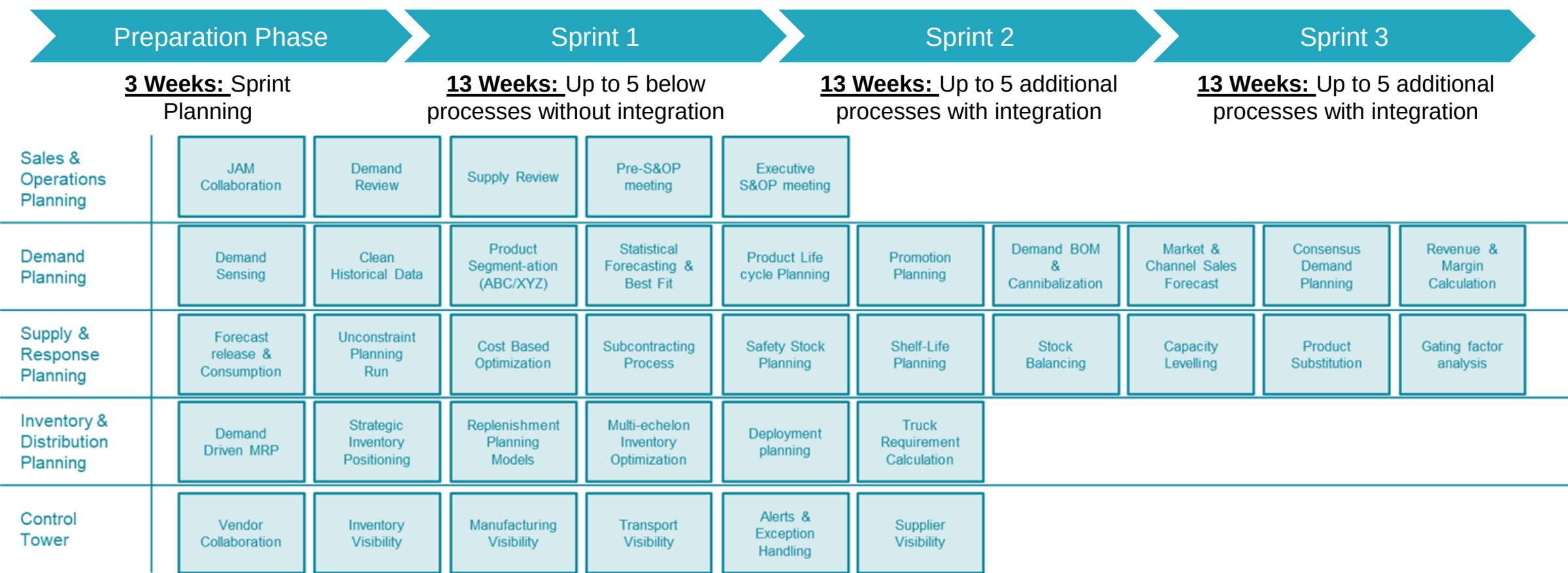
Client
Satisfaction
Score for Proof of
Concepts

#4 - AGILE SPRINT BASED MODEL

Business Requirement

Lack of a true agile sprint-based implementation model for SAP IBP. Lack of a pick and choose model for IBP solution implementation for CPG industry.

Offering Features



Benefits

- Minimum viable product approach to start with core features before moving on to advance scenarios for CPG Industry
- User focused delivery approach to maximize adoption of IBP solution across sales, marketing, demand planning, supply planning & distribution planning
- Flexible model with more power to users for selection of relevant scenarios
- Easy scope increase / decrease based on business comfort and need

Illustrative Case Study

Middle East Electronic Retail

Business Objectives

- Fast time to value with early deployment of MVP
- Need to ensure early planner involvement & hands on use

Bristlecone Solution

- Agile based sprints to deliver demand & supply planning solutions using IBP Demand, S&OP and Supply modules
- Alignment of project plan with key events such as Dubai Shopping Festival

Benefits Achieved

- 1st integrated Go-Live of basic demand in 16 weeks
- Rapid ramp up in plan adherence KPI's

Key Highlights

4

Agile Sprint Based Implementations

10⁺

Advance Scenarios Preconfigured & Implemented for CPG

100⁺

Preconfigured IBPNOW scenarios for rapid IBP build

#5 – IBP80/90 FOR CPG

Business Requirement

Need of a minimum viable product in IBP to cover basic demand planning & S&OP process for customers currently planning in legacy systems or offline. Need to consider CPG Industry specific scenarios.

IBP80/90 for CPG Offering Features & Scenarios

Sales & Operations Planning	JAM Collaboration	Demand Review	Supply Review	Pre-S&OP meeting	Executive S&OP meeting						
	Demand Sensing	Clean Historical Data	Product Segmentation (ABC/XYZ)	Statistical Forecasting & Best Fit	Product Life cycle Planning	Promotion Planning	Demand BOM & Cannibalization	Market & Channel Sales Forecast	Consensus Demand Planning	Revenue & Margin Calculation	
	Forecast release & Consumption	Unconstraint Planning Run	Cost Based Optimization	Subcontracting Process	Safety Stock Planning	Shelf-Life Planning	Stock Balancing	Capacity Levelling	Product Substitution	Gating factor analysis	
	Demand Driven MRP	Strategic Inventory Positioning	Replenishment Planning Models	Multi-echelon Inventory Optimization	Deployment planning	Truck Requirement Calculation					
	Vendor Collaboration	Inventory Visibility	Manufacturing Visibility	Transport Visibility	Alerts & Exception Handling	Supplier Visibility					
Control Tower											

IBP 80/90

Not Included

Benefits

1. Minimum viable solution with CPG Industry specific scenarios & best practices
2. Accelerated Validation driven blueprinting to reduce the implementation lead time
3. Rapid initial onboarding and training using relevant IBPNOW artefacts
4. Faster solution build using reference planning views, integration mapping sheets, etc.
5. Enabling higher user adoption due to early access of users into system & scenarios

Illustrative Case Study

Middle East Dairy Firm

Business Objectives

- Transition from offline planning tool to SAP IBP
- Need to increase forecast accuracy using advance algorithms

Bristlecone Solution

- Minimum viable product package for dairy industry implemented in 80 days
- Intelligent Demand Planning using advance algorithms

Benefits Achieved

- Go live in 80 days
- ~15% improvement in forecast accuracy

Key Highlights

5

CPG IBP80/90
Go-Live's

5

Sub industry
scenarios like
Dairy, Retail,
F&B, etc.

100+

Preconfigured
CPG Planning
Scenarios

#6 – IBPNOW FOR CPG BASED IMPLEMENTATIONS

Business Requirement

Lack of comprehensive planning solution in line with Leading CPG industry best practices covering all aspects of supply chain ,i.e., demand, supply, inventory, S&OP, DDMRP & Supply Chain Control Tower

IBPNOW for CPG Offering Features & Scenarios

Sales & Operations Planning	JAM Collaboration	Demand Review	Supply Review	Pre-S&OP meeting	Executive S&OP meeting						
Demand Planning	Demand Sensing	Clean Historical Data	Product Segmentation (ABC/XYZ)	Statistical Forecasting & Best Fit	Product Life cycle Planning	Promotion Planning	Demand BOM & Cannibalization	Market & Channel Sales Forecast	Consensus Demand Planning	Revenue & Margin Calculation	
Supply & Response Planning	Forecast release & Consumption	Unconstraint Planning Run	Cost Based Optimization	Subcontracting Process	Safety Stock Planning	Shelf-Life Planning	Stock Balancing	Capacity Levelling	Product Substitution	Gating factor analysis	
Inventory & Distribution Planning	Demand Driven MRP	Strategic Inventory Positioning	Replenishment Planning Models	Multi-echelon Inventory Optimization	Deployment planning	Truck Requirement Calculation					
Control Tower	Vendor Collaboration	Inventory Visibility	Manufacturing Visibility	Transport Visibility	Alerts & Exception Handling	Supplier Visibility					

IBPNOW Scenarios

Benefits

1. Comprehensive blueprint with CPG Industry specific scenarios & best practices
2. Rapid initial onboarding and training using IBPNOW artefacts
3. Faster solution build using reference planning views, integration mapping sheets, etc.
4. Enabling higher user adoption due to early access of users into system & scenarios
5. Risk reduction by using IBPNOW as a benchmark for CPG industry best practices

Illustrative Case Study

Globally Leading Brewery

Business Objectives

- Improve demand visibility in complex supply chain
- Quick Response to drastic demand changes

Bristlecone Solution

- Strategic segmentation-based forecasting to enable automation
- Intelligent Demand Planning using Demand patterns in short term

Benefits Achieved

- Global process harmonization inclusive of local best practices
- 20% reduction in planning FTE by setting up a COE

Key Highlights

10⁺

CPG IBPNOW Go-Live's

50⁺

Supporting artefacts: integration mapping, reference documents

100⁺

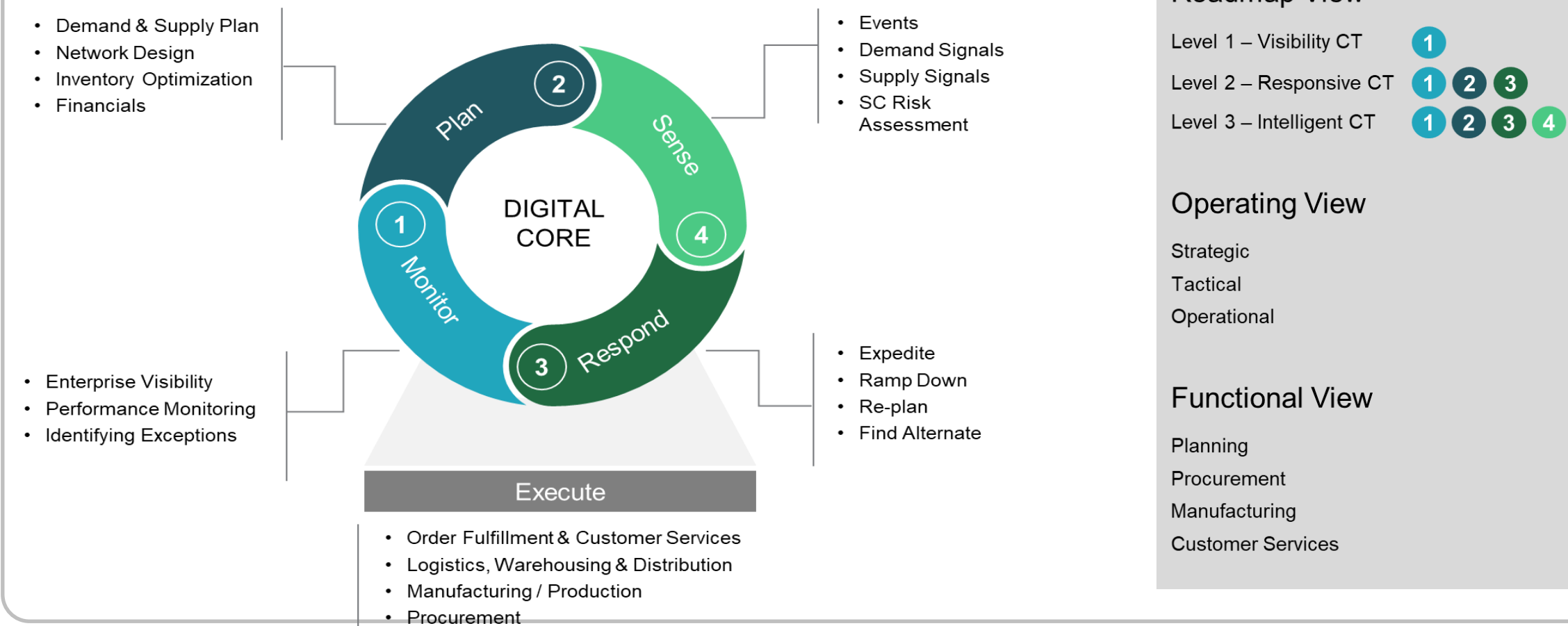
Preconfigured CPG Planning Scenarios

#7 – SUPPLY CHAIN CONTROL TOWER

Business Requirement

Lack of clarity in creating a comprehensive solution for control tower transformation to augment existing supply chain planning landscape and enhance visibility & responsiveness

Control Tower Offering Features



Benefits

1. An iterative, small sprint-based transition to control tower transformation
2. Supply Chain KPI's / Metric driven dashboards to improve response time
3. Proactive decision making by predicting disruption using advanced analytics
4. Interactive Dashboards allowing drill downs improving Root cause identification
5. Global companies to use alerts to identify issues with local KPI's

Illustrative Case Study

Globally Leading
Genetic devices
Manufacturer

Business Objectives

- Poor visibility of Supply Chain to Senior Management
- Poor Exception Management capabilities

Bristlecone Solution

- Improved KPI driven Control tower capabilities for Planning, Logistics & Manufacturing based on Agile methodology
- Role Based KPI dashboards

Benefits Achieved

- Enhanced exception management & Supply chain visibility
- Increased efficiency to tackle recurring supply chain challenges

Key Highlights

5

CPG Control
Tower
engagement

50⁺

Preconfigured
system
accelerators

10⁺

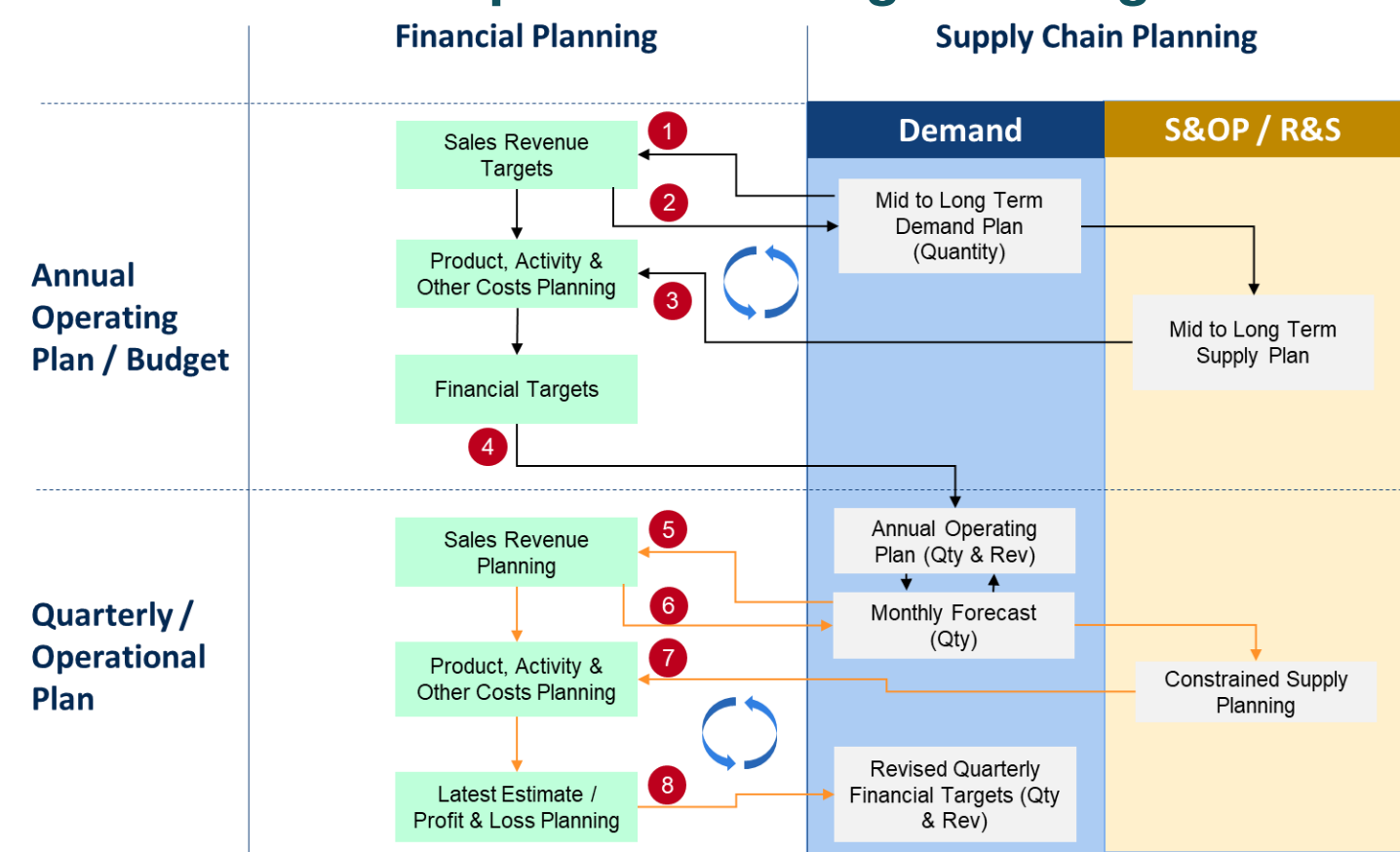
Artefacts for
detailing of
supply chain
control tower use
cases

#8 – COLLABORATIVE ENTERPRISE PLANNING

Business Requirement

Lack of comprehensive simulation capability by integrating supply chain planning tool with financial planning tool. No capability to enable P&L simulation up to gross margin level

Collaborative Enterprise Planning Offering Features



Benefits

1. Integrated financial planning will enable more accurate financial projections
2. Reduced turn around time for creating financial estimations
3. Optimal financial decision making with use of real supply chain data
4. Capability to compare budget, actuals & forecast at a gross margin level
5. Financial modelling of intercompany flows & impact of currency conversion

Illustrative Case Study

Global Dispensing
system Manufacturer

Business Objectives

- Manual intercompany relationships with PO / SO relationships
- No link between Financial Planning & Supply Chain Planning

Bristlecone Solution

- Supply Chain Financial Planning solution using combination of IBP S&OP and Bi embedded BPC
- Collaboration between supply chain & finance teams for annual, quarterly as well as monthly planning cycles

Benefits Achieved

- Improvement in budget plan adherence
- Faster planning cycle time through connected systems

Key Highlights

10⁺

Supply Chain
Financial
Planning
Scenarios

3

Global
implementations
with Financial
Planning

15⁺

Preconfigured
Interface
mapping
templates

#9 – CONTINUOUS INNOVATION MODEL

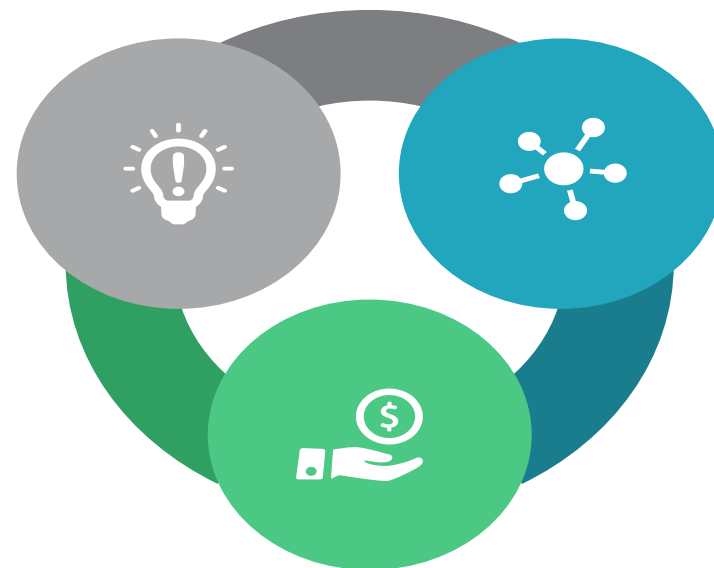
Business Requirement

Lack of continuous upgradation of process, features after Planning solution implementation leading to inefficient planning process in comparison to best-in-industry practices

Offering Features

Solution Enhancements

- Evaluate and implement new / improved functionality available with IBP quarterly upgrade



Effectiveness Measurement

- Conduct system health check for performance
- Conduct value add analysis to determine process effectiveness & identify gaps
- Measure plan adherence for production, transportation & deployment and identify gaps.
- Evaluate planner productivity and identify NVA activities to be eliminated

Solution Refinement/Fine tuning

- Evaluate and fine tune supply & inventory optimizations parameters
- Fine-tune Statistics model based on forecast Accuracy/Models & Historical data pattern

Benefits

1. Leverage quarterly upgrades in CPG Industry Cloud, for eg: new demand planning algorithms for intelligent demand planning, etc.
2. Identify & Incorporate best practices & areas of improvement from across the globe
3. Finding training and change management requirement and creating roadmap
4. Quantifiable assessment of system effectiveness and usage of planning system

Illustrative Case Study

Globally Leading
Battery Manufacturing

Business Objectives

- Reduction in Planner efficiency and accuracy
- Lack of understanding of gaps in Demand and Supply planning

Bristlecone Solution

- Improved statistical forecasting using latest cloud features
- Systematic scenario planning with segmented runs for improved performance

Benefits Achieved

- 20% faster supply optimizer planning run time post upgrade
- 5% Increase in statistical forecast accuracy

Key Highlights

10⁺

Customers onboarded on Continuous Innovation Model

30⁺

Preconfigured assets & KPIs for measuring system effectiveness

5⁺

Options for reporting tools used like BI, Tableau, Qlik, SAC

#10 – PPDSNOW

Business Requirement

Lack of SCOR compliant integrated solution for Planning & execution in terms of a feasible plan for process & discrete manufacturing processes relevant to CPG role

PPDSNOW Offering Features & Scenario

Configuration	DS Board Profiles	Optimizer Profile	Setup Groups/Matrix	Factory Calendar	Production Planner	Alert Profile				
Business Process	Lot size Planning	Scrap Management	Overlapping Production	Net Requirement Planning	Material Variant scenario	Sequencing Setup	Push Production	Shel-f Life Planning	Cross Location Planning	Production Planning
Roles & Authorization	Master Planner	PPDS Super User	Senior Management	Shop floor Planners						
Master Data	Material Master	BOM	Work Center	Routing	Production Version	Integration Model				
Data Templates	Location Master	Product Master	Resource Master	Transportation Lane Master	PPM Master	Purchase Info Record	Setup Groups			

 PPDSNOW

Benefits

1. Precise Material and capacity planning (in Hrs / Mins / Seconds) in one planning process
2. Increased Planning accuracy through date determination based on actual capacity load
3. Reduction in variation between planned and actual production
4. Improved Capacity utilization of the constrained resource
5. Reduction in production lead time with optimized production planning and sourcing

BRISTLECONE

Illustrative Case Study

Global Dairy Firm

Business Objectives

- Optimize the production schedule for maximizing capacity utilization of resources
- Optimally manage balance with milk supply

Bristlecone Solution

- Automated scheduling of cheese as per product mix scheduling constraints
- Campaign planning on proteins and lactose materials for planning as per the sequence dependent setup matrix

Benefits Achieved

- Enhanced Plant capacity utilization by 2%
- 15% Reduction in setup time

Key Highlights

30⁺

PPDSNOW Go-Lives

40⁺

Preconfigured CPG industry Scenarios

20⁺

APO PPDS & S/4 PPDS Solution SME's

#11 – AATPNOW

Business Requirement

Lack of a preconfigured solution for CPG industry for order fulfillment planning to enhance OTIF and stick to commitments provided

Offering Features

Pre-configured Scenarios	Basic ATP Check	Product Allocation	Back Order Processing	Release for Delivery	Supply Assignment Run	IBP response with S4 HANA
Documents	Blueprint Document	System Configuration				
Training Manuals	S4 HANA AATP Introduction	S4 HANA AATP Fiori Apps	S4 HANA Features	S4 HANA AATP Comparison		
Data Templates	Material Master	Customer Master	Requirement Class	Availability Check Group	Procedure by Requirement Class	Availability Check for Schedule Line
Interfaces	S4 to IBP	IBP to S4				

AATPNOW

Benefits

1. Comprehensive blueprint with CPG Industry specific scenarios & best practices
2. Rapid initial onboarding and training using AATPNOW artefacts
3. Integrated into S/4 HANA Core; With Improved performance with the in-memory platform
4. Simple, Intuitive mechanism for maintenance of Allocations. Prioritized customers with the new “Win/Gain/Redistribute/Fill/Lose” strategies

Illustrative Case Study

Globally Leading
Chemical Manufacturing

Business Objectives

- To improve Order Commitments process for supply disruption & abnormal demand scenario
- Inclusion of differential management for distribution

Bristlecone Solution

- Product allocation solution capable of maintaining customer entitlement in advance based on forecast
- Entitlement planning at different level to improve confirmation

Benefits Achieved

- Improved order confirmation efficiency for high priority customer
- Increased customer satisfaction score for our client

Key Highlights

45+

AATPNOW Go-Live

30+

Preconfigured CPG industry Scenarios

30+

APO gATP & S/4 aATP Solution SME's

#12 – NETWORK OPTIMIZATION

Business Requirement

Lack of Comprehensive integrates network optimization solution to address scenarios like DC consolidation, New geographies ,new channel investment for changing demands etc.

Offering Features

Result Evaluation

Develop management reports and evaluate scenario results –

1. Compare against baseline scenarios: Cost, service level, utilizations
2. Supply chain robustness assessment: if demand increases or decreases by 20%

Scenario Simulation & Sensitivity Test

Simulate scenarios (using demand projections) –

1. Check current network's ability to handle them
2. Determine network changes required to handle scenarios

Sensitivity tests–

1. Check robustness of the network with changing variability in demand & supply
2. Change in cost structure
3. Activation/deactivation of facilities

Baseline Scenario

Build baseline scenario (using last 1-year data) –

1. Ensure data accuracy and completeness
2. To validate the model for representativeness to current network
3. Get incremental improvements in current operations



Analyze

Business strategy for medium/long term (2-6 years) -

1. New market/
2. New product/
3. Improving bottom-line etc..

Identify

Supply chain objectives to support business strategy

Scenario Selection

Considering SC objective, identify most likely business scenarios related to -

1. **Marketplace:** competition, demand, pricing, new markets etc.
2. **Operational:** capacity usage, costs, logistics, warehouse consolidation etc.
3. **Strategy:** outsourcing, contract manufacturing etc.

Evaluation Criteria

Finalize the evaluation criteria for the scenario simulation –

1. Service level
2. Cost
3. Asset utilization.

Illustrative Case Study

Globally Leading CPG Manufacturing

Business Objectives

- Network Model to simulate detailed analysis of structural scenarios
- Assess impact of opening/closing of manufacturing capability

Bristlecone Solution

- Designed & built baseline(& extended) optimization model
- Evolved baseline to cover special clients & multiple shipping lane policies

Benefits Achieved

- Extremely accurate baseline model with supply chain landed cost within 3% of actuals
- Rapid implementation using existing enterprise infrastructure

Benefits

1. Preconfigured add on solution in SAP IBP for adhoc network optimization simulations
2. Faster network simulations with cost / efforts saving by leveraging existing IBP solution
3. Optimal financial decision making with use of real supply chain data
4. KPI based Optimization runs to ensure strategic advantage on network optimization
5. Reduced turnaround Time for network optimization for multiple sceanrios

Key Highlights

2⁺

Customers onboarded for Network Optimization

5⁺

Preconfigured assets & KPIs for measuring system effectiveness

5⁺

Preconfigured scenario for network optimization scenario



**Let's Keep The
Conversation Going**

BRISTLECONE

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