

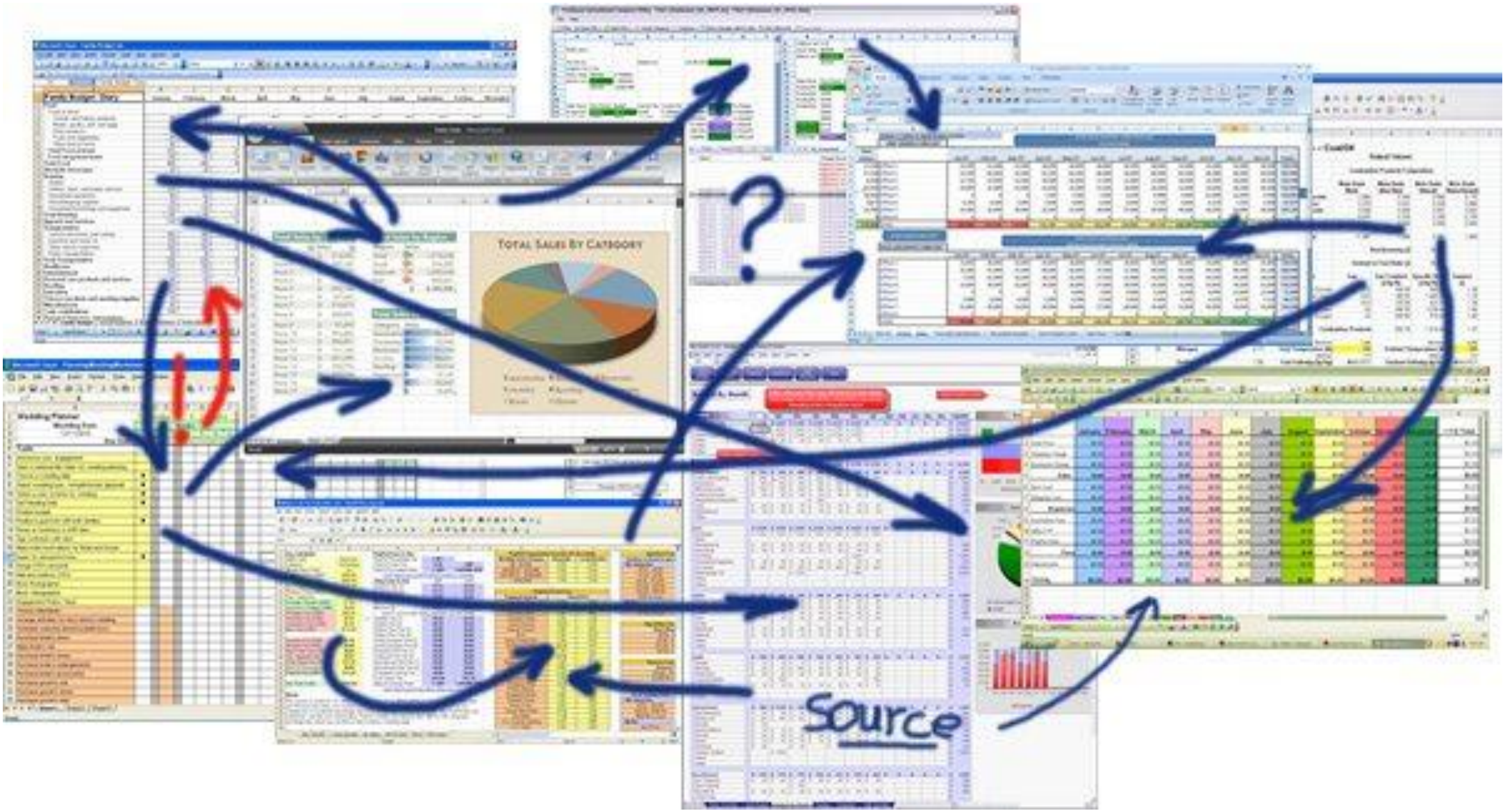


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CLIMBING THE S&OP MATURITY LADDER – CASE STUDIES

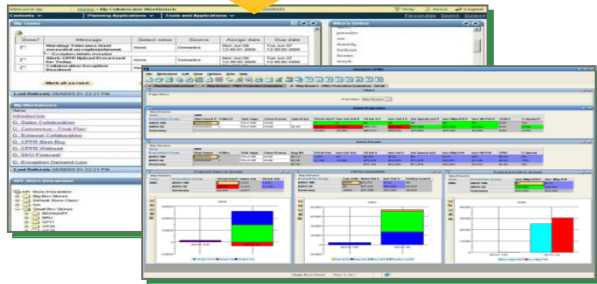
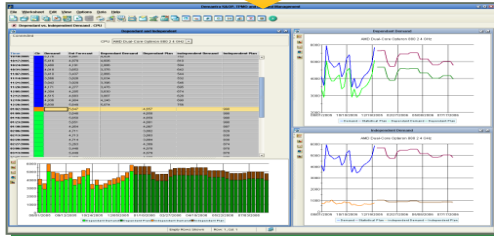
Luc Girouard
Sr Solution Director, Inspirage
April 19th, 2018

WHAT IS THE #1 PLANNING
TOOL IN THE WORLD?



APPROACH TO A BETTER PROCESS

DYNAMIC, CONTINUOUS, AND COLLABORATIVE S&OP PROCESS






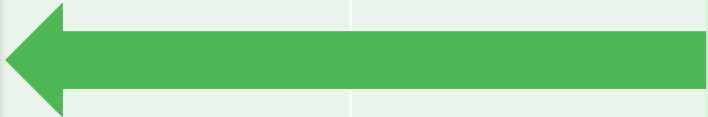
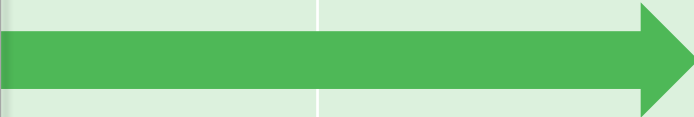
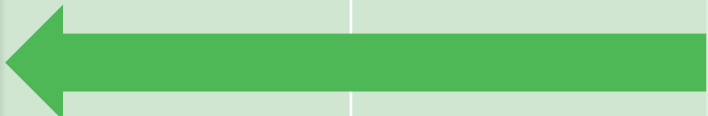
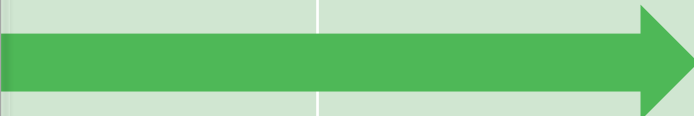


- **Eliminate decision making latency by focusing on excellence in demand visibility**
 - Sense demand more frequently and closer to the point of consumption
 - Replace spreadsheets with one number demand management - Collaborate with all constituents
- **Improve your forecast accuracy**
 - Use advanced analytics and statistics
- **Shape demand**
 - Promotion excellence and decomposition
 - Leverage granular demand signals (customer, channel, store, shelf)
 - Identify and simulate cross selling opportunities
- **Evolve to dynamic S&OP**
 - Profitable demand response
 - Identify supply side opportunities
 - Define and monitor customer based metrics
 - Get visibility to sales tactics (price breaks, promotions, deals)

CASE STUDIES

CASE STUDIES

Focus for Today

		 EMERSON	 Cummins	 smiths	 NCR	 GKN Driveline
High (ETO / CTO / MTO / MTS-F)	Product Complexity	High (ETO / CTO / MTO)	High (ETO / CTO / MTO / MTS-F)	High (ETO / CTO)	High (ETO / CTO / MTO)	High (ETO / CTO / MTO)
Centralized/Decentralized	Company Structure	Decentralized	Decentralized	Decentralized	Centralized	Decentralized
Centralized/Decentralized	Systems	Decentralized	Decentralized	Decentralized	Centralized	Decentralized
<ul style="list-style-type: none"> Imp. Service Reduce Inv. Imp. Visibility 	Goals				<ul style="list-style-type: none"> Imp. Service Reduce xInv. Imp. Visibility 	
<ul style="list-style-type: none"> One Platform Demand S&OP 	Approach				<ul style="list-style-type: none"> One Platform Demand S&OP 	

CASE STUDY: EMERSON (1/4)

Global Industrial Manufacturer of Complex Equipment



Key Challenges

- Plant level planning not global supply chain level planning
- Improve and smooth forecast
- Better utilize supply chain capacity

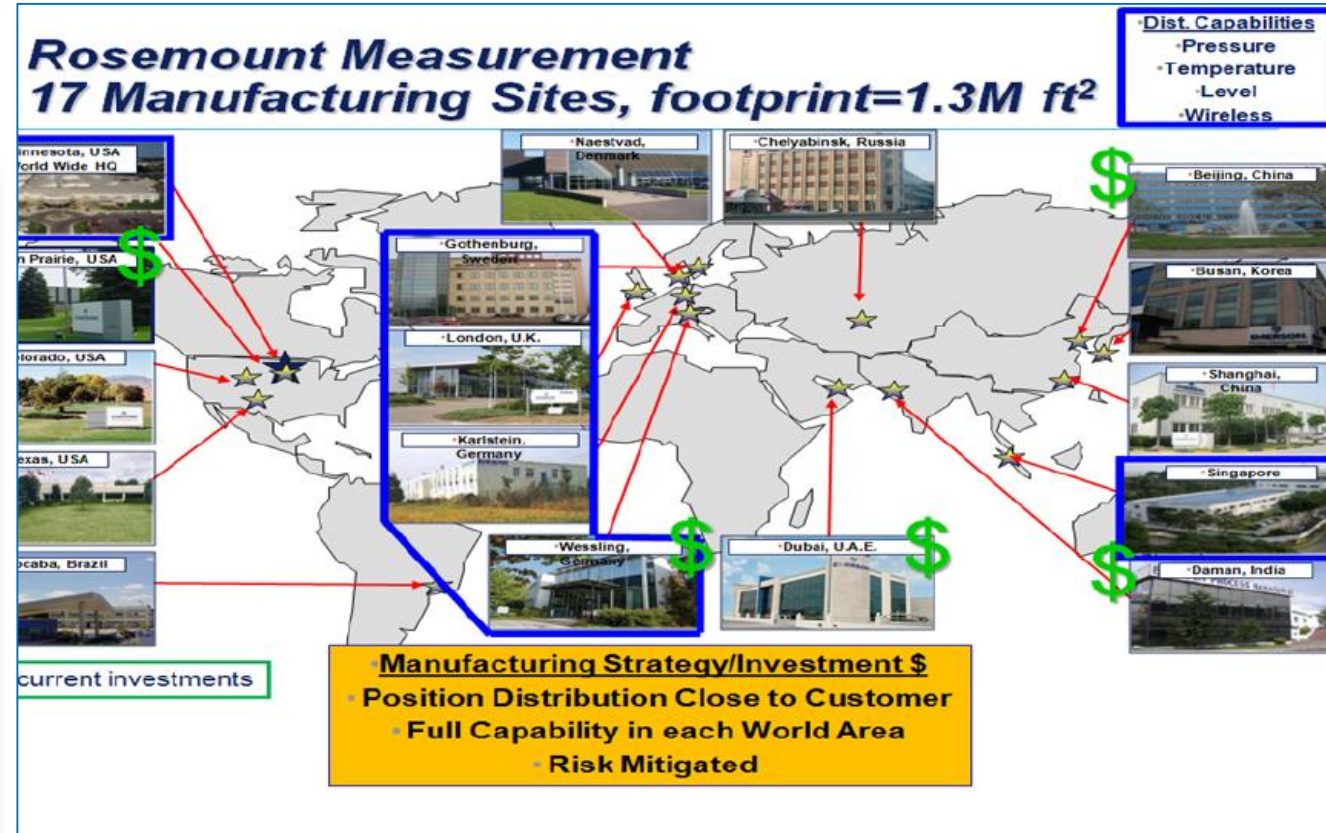


CASE STUDY: EMERSON (2/4)



Approach

- Corporate Initiative
 - Sales, Mktg, Fin, Eng & Ops
 - Executive sponsorship
 - Standard processes & technologies
- Divisional rollout
 - Individual assessments
 - Pilot: Rosemount (Process Mgt)



CASE STUDY: EMERSON (3/4)



Approach cont'd

- Started with a manual process
 - Led by President, MS Excel based
- Chose Oracle platform for DM & SOP
 - Scale, global view, CTO forecasting
- Grew into capabilities
 - Started with consolidated view of demand
 - Moved to a collaborative process & introduced supply planning analysis



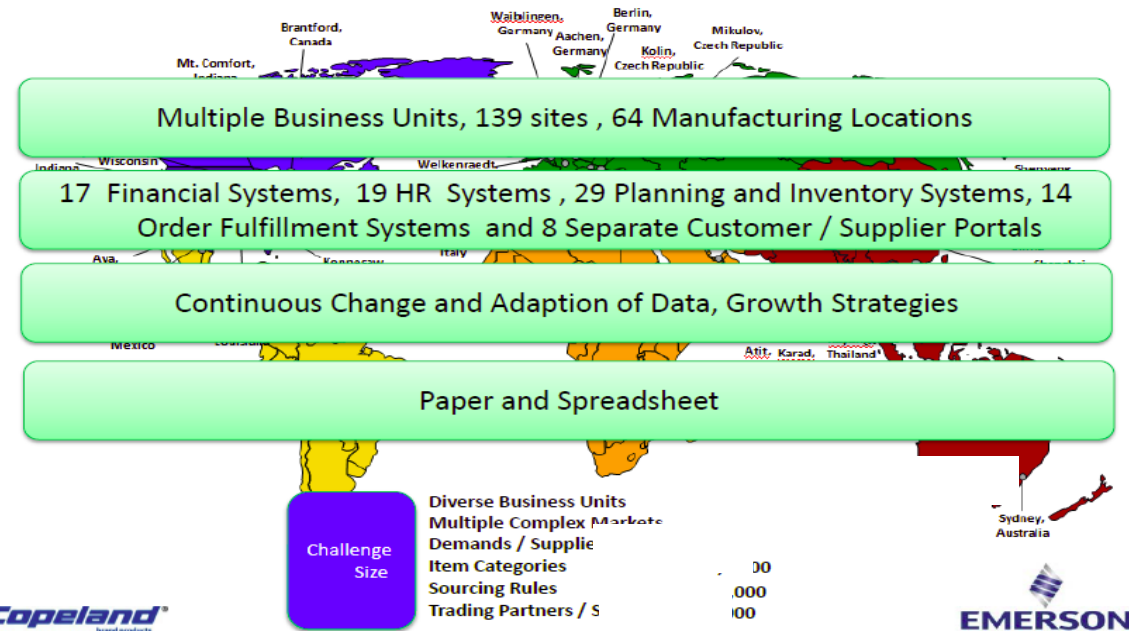
CASE STUDY: EMERSON (4/4)



Results & Next Steps

- Reduced operations cost by optimizing asset mgt through better planning
- Increased sales and customer loyalty by improving RDSL & PDSL
- Provides global visibility across enterprise planning organization
- *Rolling out to other divisions. Latest example: Climate Technologies*

Emerson Climate Technologies Inc. faces many Challenges.....



Copeland
brand products

Emerson Confidential

EMERSON
Climate Technologies

Filename/Presenter-Topic: S232012

CASE STUDY: CUMMINS (1/4)

Global Industrial Manufacturer of Complex Equipment



Key Challenges

- “How do we prepare for Growth?”
- Improve customer service
- Increase speed and flexibility
- Improve capacity and distribution
- Manage complexity via postponement

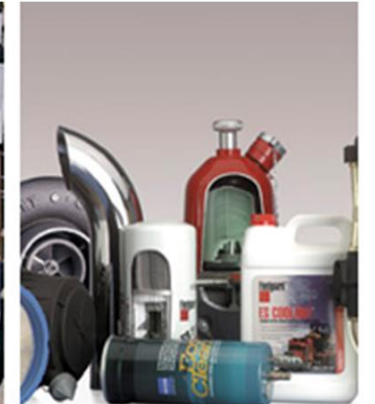
Cummins Businesses



Engines



Power
Generation



Components,
Filtration,
Distribution



CASE STUDY: CUMMINS (2/4)



Approach

- Strategic 5yr plan: Drive Growth
 - By better supply chain
- Divisional approaches
 - Individual assessments
 - Parallel engagements at Power Gen, Components (Turbo Tech, Filtration, Emissions Solutions)

Five key drivers

- Growth mindset
- Multinational to Global
- Supply Chain
 - Vision: reliable market driven supply chains enable growth
 - “Becoming a supply chain company”
- Customer focus
- Leadership



CASE STUDY: CUMMINS (3/4)



Approach, Cont'd

- Standardize to best practices
- Think globally
 - Unified view of demand
 - Holistic supply plans
- Oracle: standardized supply chain management solution
 - Scale
 - Breath and depth (CTO, Postponement)

... Grouped in 5 Themes to Drive Growth

Improve Speed and Flexibility

- **Build Global Enterprise Planning and Centralize Demand Planning**
- Create Responsiveness with End-to-End Supply Chain Visibility
- Elevate Materials Planning Capability
- Create Flexible Manufacturing Networks Optimized for Throughput

Improve Distribution Networks and Capacity

- Optimize Transportation, Freight and Duty
- Centralize Warehousing Activities – Inbound and Outbound

Improve Customer Responsiveness

- Use Common Supply Chain Models Across Our Businesses
- Select and Manage Suppliers to Enable Market-Focused Supply Chains
- Use Simulation and Analytics in Supply Chain Design
- Develop Cost-to-Serve Models for Each Supply Chain

Manage Product Complexity Through Postponed Differentiation

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Functional Excellence

- Develop Our People to Create Supply Chain Expertise



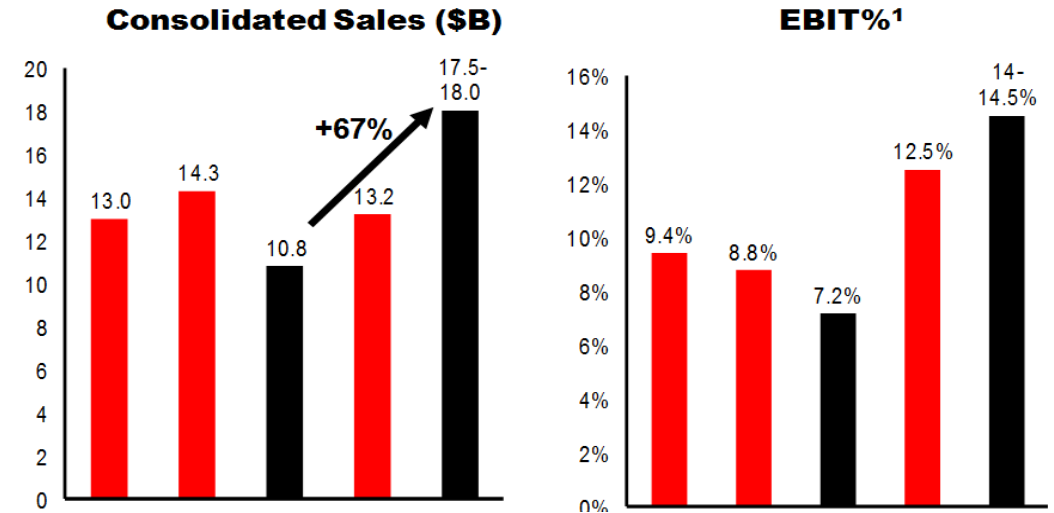
CASE STUDY: CUMMINS (4/4)



Results & Next Steps

- “Significant contributions from supply chain over last 5 yrs” – VP Supply Chain
- Power Gen live (S&OP)
- 3 Components divisions live (S&OP)
- Engines live (Supply only)
- Distribution in flight (S&OP)
- ***Corporate center of excellence***

Revenue Growth and Margin Expansion



¹EBIT excludes restructuring charges and gain from sale of business.

3



CASE STUDY: SMITHS MEDICAL (1/4)

Global Manufacturer of Complex Medical Equipment

smiths medical
bringing technology to life

Key Challenges

- Large portfolio of products sold worldwide to multiple customer channels
- No connection between sales and ops
- Didn't "plan the sale" or "sell the plan"
- High inventory levels for protection
- No global view
- No long term view

Smiths Medical: Bringing Technology to Life

#BOTBSOP

Our mission is to help healthcare professionals make every intervention successful

Deliver Medication

Reduce programming & delivery errors with intelligent pumps
Relieve acute & chronic pain
Treat cancer



Provide Vital Care

Manage acute and chronic airway conditions
Maintain correct body temperature
Monitor vital signs
Assist reproduction



Keep People Safe

Provide safe treatment access
Prevent needle stick injuries
Reduce cross infections



Vision: Provide innovative, life-enhancing medical devices in the global markets we serve

CASE STUDY: SMITHS MEDICAL (2/4)

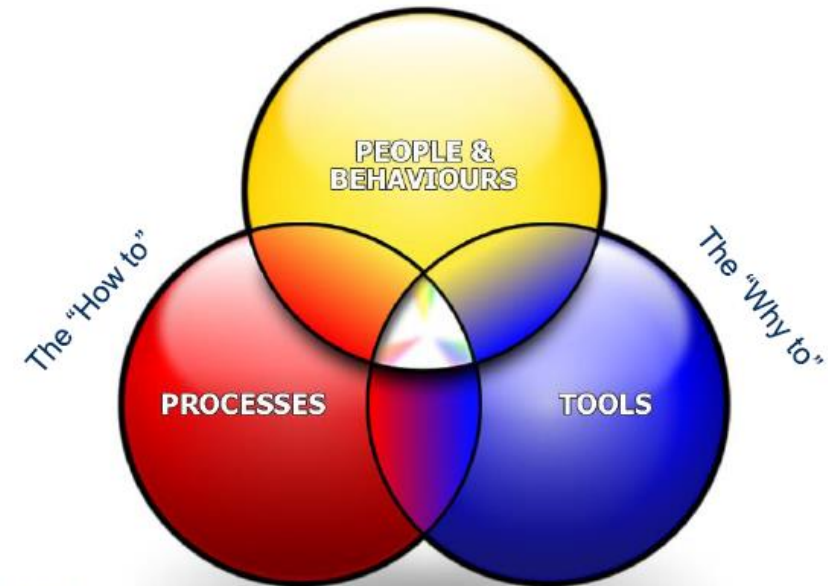
smiths medical
bringing technology to life

Approach

- IBP process led by executive mgt
 - Formed functional teams with sr. level
 - Built trust
 - Transformed meetings from “firefighting” to “risk avoidance”
- Realized technology was key enabler
 - Right tools for job
 - Start simply, build expertise as you go

Setting the Right Foundations

#BOTBSOP



Source: Oliver Wight

- IBP is 50% change management, 40% process and 10% technology
- People and Behaviours are the hardest to change – ensure there is a game plan!
- Technology is an enabler and without tools the other 90% is likely to fail

CASE STUDY: SMITHS MEDICAL (3/4)

smiths medical
bringing technology to life

Results over 4 years

- 23% revenue growth
- Increased operating margins from 16.8% to 23.5%
- Improved forecast accuracy by 56%
- Increased service levels by 15%
- Reduced inventory by 26%



CASE STUDY: SMITHS MEDICAL (4/4)

Results, Cont'd

- Demand - Supply visibility and alignment
- Quicker identification of gaps
- Sales pipeline management
- Improved decision making
- More effective allocation of resources
- Increased agility/risk mitigation

Identifying Risks

Examples include:

- Sales pipeline visibility
- New product development
- Product Registration
- Product end of life
- Component supplier related issues
- Internal supply related issues
- Stock allocation

#BOTBSOP

LESSONS LEARNED

S&OP IS A JOURNEY

Maturity Levels based on Gartner’s recommendations



- Business plan drive forecast
- Short-term forecast
- Aggregate S&OP Data
- **Off-line Demand / Supply tactical balancing**
- Volume focused

- Tribal knowledge dependency
- **Manual Tools**
- Silo focused

- Consensus Forecasting (volume and value)
- Capacity Constraints
- **Demand, supply and inventory plans at aggregate level.**
- Scenario planning using simulated plans
- New Product Plans

- Foundational dashboards
- **Multiple sources of truth**
- Conflicting metrics across functions

- **Demand/supply tactical balancing on-line**
- Financial projections – price, cost, inventory and margin projections
- IBP management dashboards & KPI suite
- Flexible Budgeting

- Supply Chain Segmentation
- **Robust Long-Term Planning Processes**

- Business simulation capability for demand shaping, financial reconciliation and cost to serve
- **Demand Driven**
- Product & Innovation Reviews
- Inventory Optimization

- Centers of Excellence
- Master Data Governance
- Digitization – IoT etc.
- Business wide focused
- **Integrated suite of tools**

- Plan drives the business, enabled and linked to strategy
- **Market Driven**
- Extended Integrations:
 - New Product Introduction
- Extended / Integrated Analytics (Control Tower)

- IBP management reviews not an “event”
- Network Optimization
- **Extended Enterprise focused**

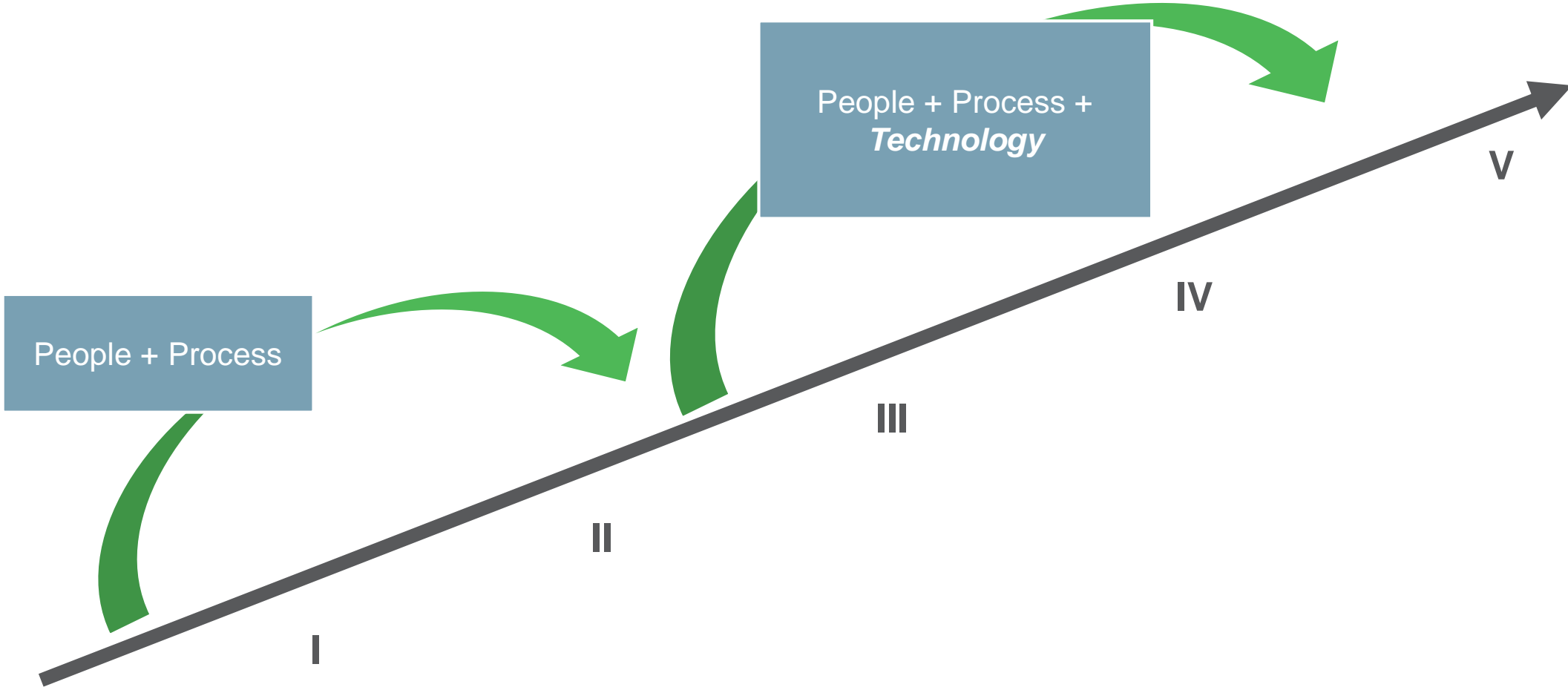


Efficiency

Effectiveness

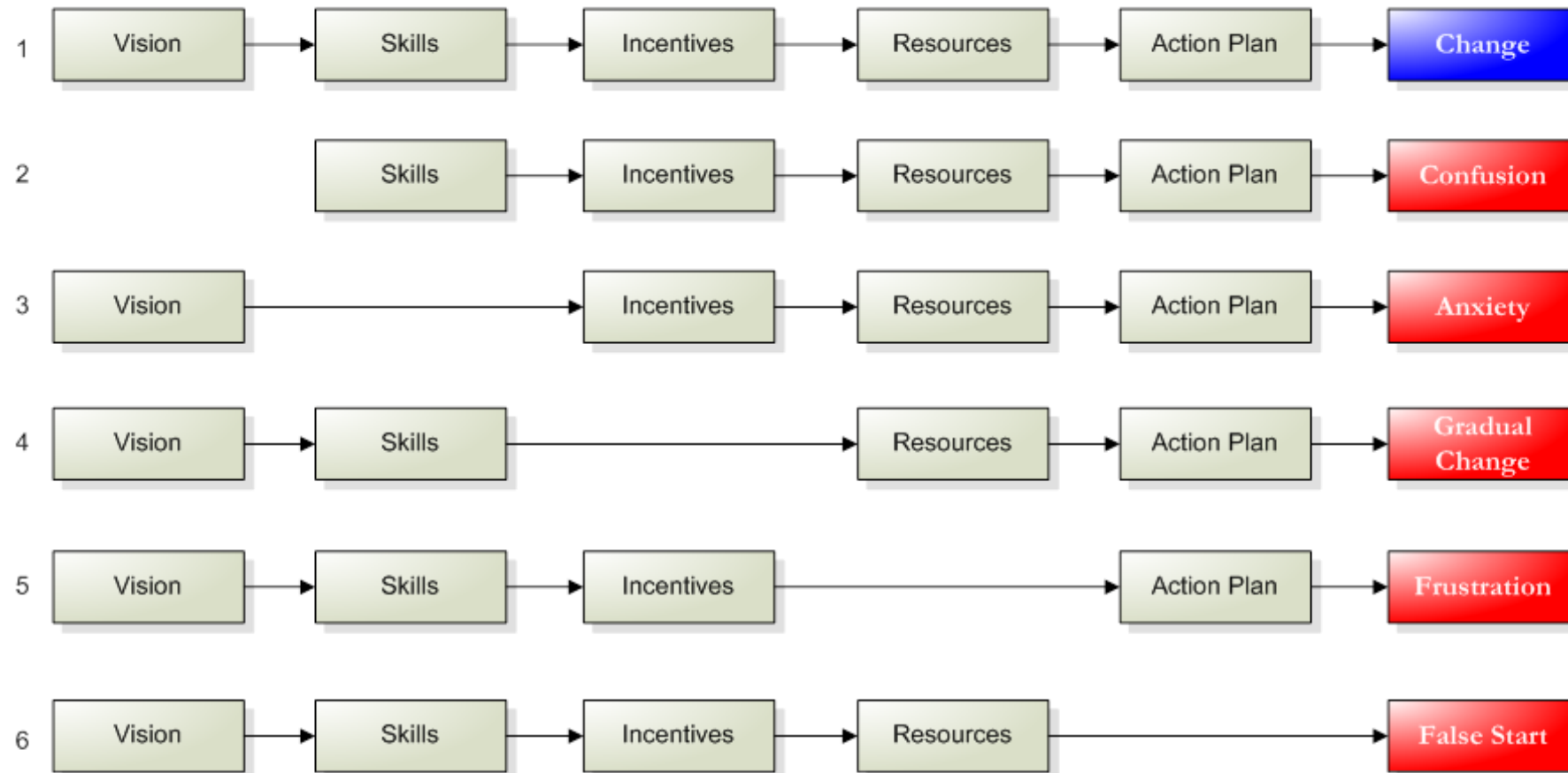
Optimization

PEOPLE + PROCESS CAN ONLY TAKE YOU SO FAR



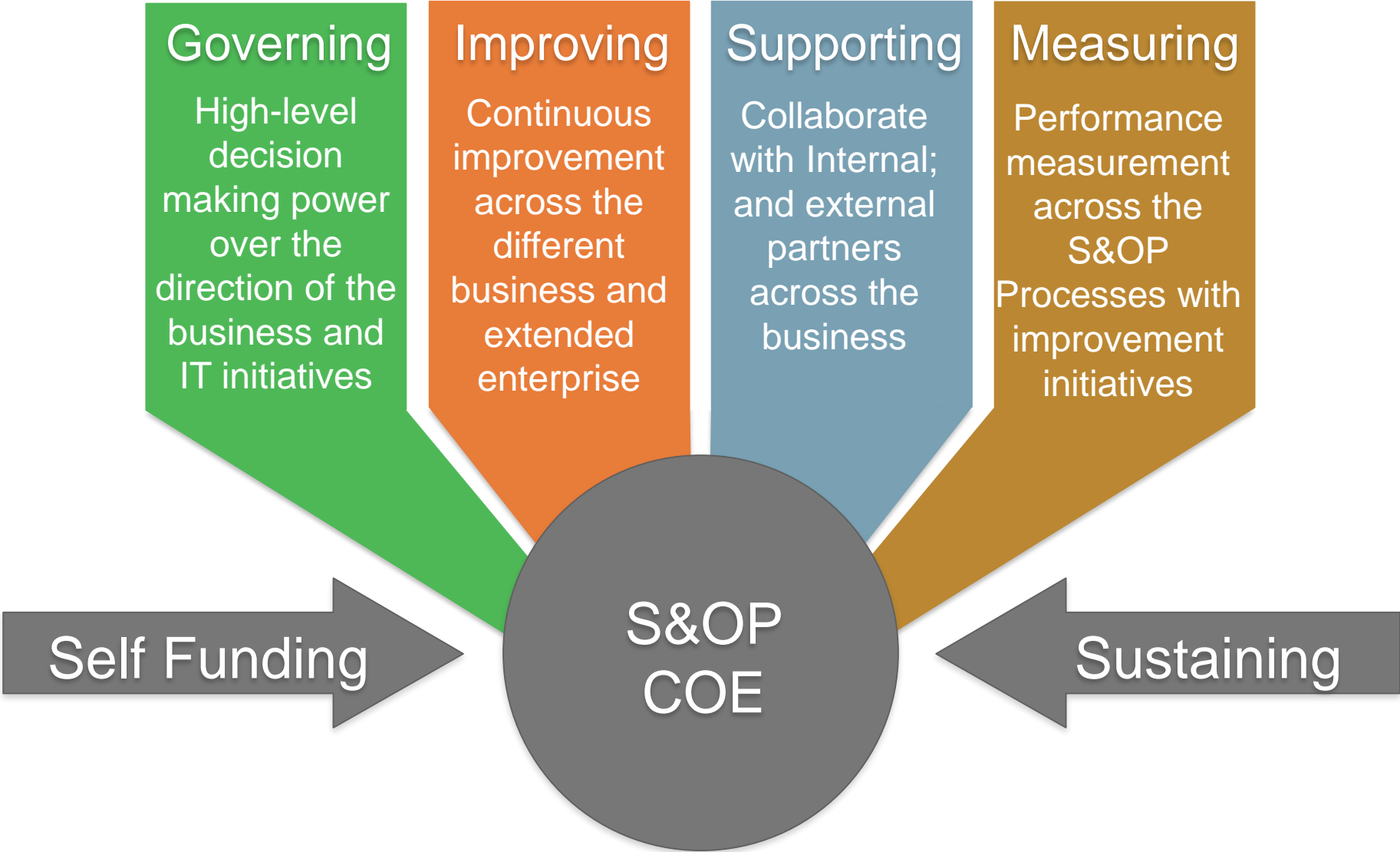
S&OP Process Maturity

PROCESS – THE RIGHT SEQUENCE IS IMPORTANT



Source: "Managing Complex Change", Ambrose 1987

ESTABLISH A CENTER OF EXCELLENCE

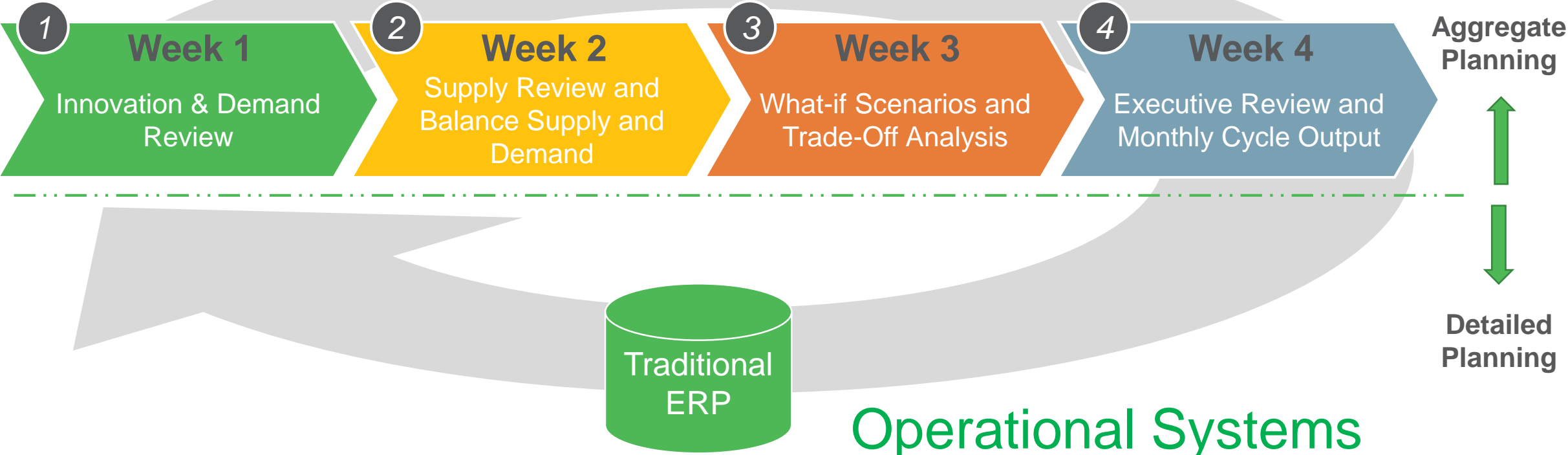


DATA IS CRUCIAL

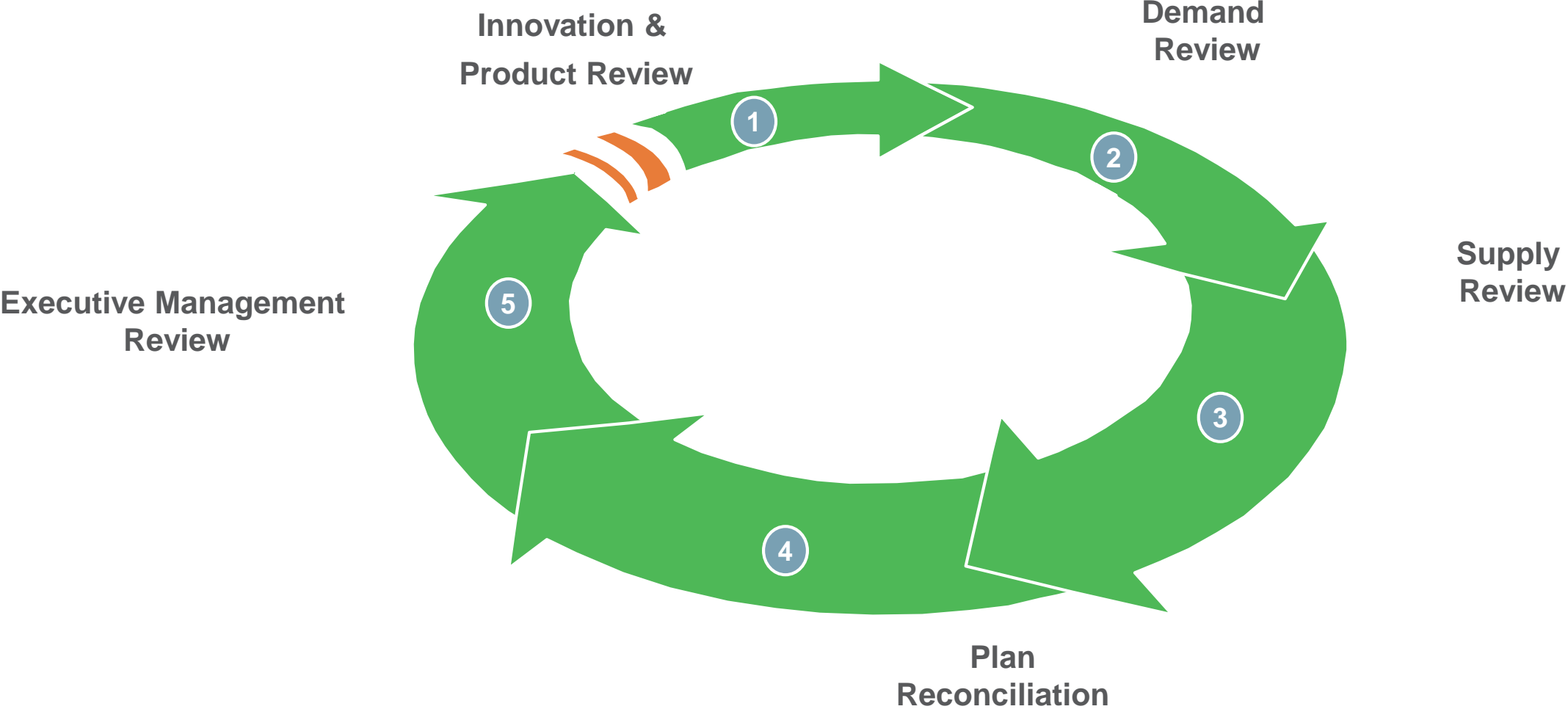
Collaborative Systems for Cross Functional Discussions



Recurring Monthly Process

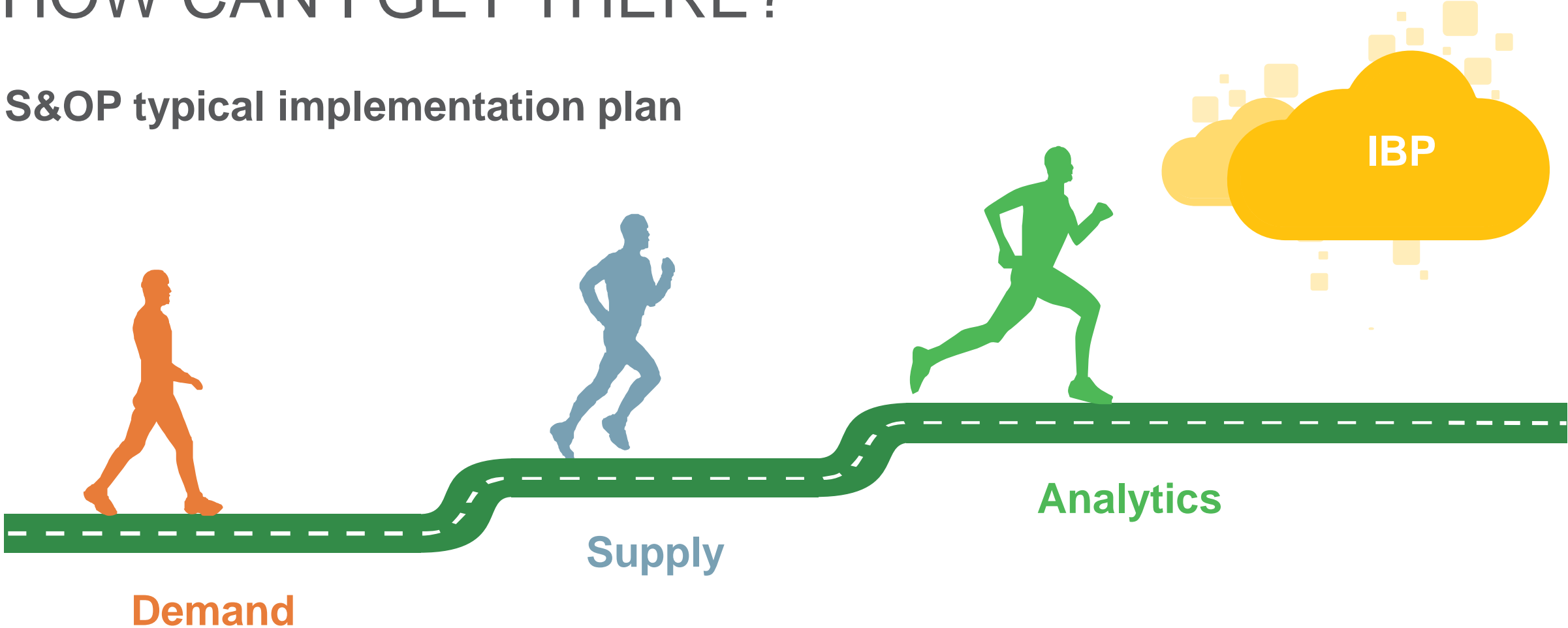


S&OP TOOL NEEDS TO BE ABLE TO GROW WITH YOU



HOW CAN I GET THERE?

S&OP typical implementation plan



GOAL – MARRY OPERATIONS WITH BUSINESS

How CEO
sees the business



VS.

How Supply Chain
sees the business



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Latest Business Plan

- What has changed? One Pagers
- What are the assumptions?
- What is the impact of the change?
- 24 month - P&L, Balance Sheet, Cash
- What is the gap to plan?
- What are the Risks and Opportunities?

Decision Support

- What are the gap closing opportunities?
- Which options to evaluate?
- Financial modelling of alternatives
- Decisions required - now and in the future
- Recommendations



inspiration[®]



THANK YOU