



# S&OP – Back to the Future

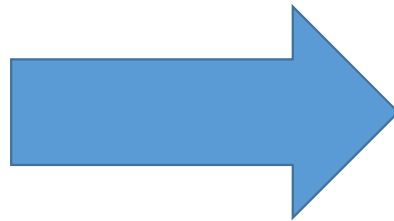
Dick Ling

# Back to the Future



## Back

What has happened  
with S&OP over the  
last 33 years?



## Future


What is going to be  
the future of  
S&OP?

# S&OP Process & term Introduced in 1984



- Slow to be adopted
- First Book “Orchestrating Success” in 1988
- APICS initially ignored it
- No Software Companies supported it
- Academia did not recognize it
- Initially thought by many as Demand Supply balancing
- I spoke every year at International APICS on S&OP - Not many speakers on the topic

# S&OP began to be Accepted in the 1990's

- 
- APICS finally added it to their Dictionary & Curriculum
  - Articles and Books began to emerge
  - Software companies still pushing ERP
  - Most Companies utilized Excel Spreadsheets For S&OP
  - Potential still misunderstood by many
  - S&OP Term removed from APICS Dictionary
  - I had to introduce S&OP as a new and emerging Term
  - I focused all my energy helping clients implement S&OP with great success

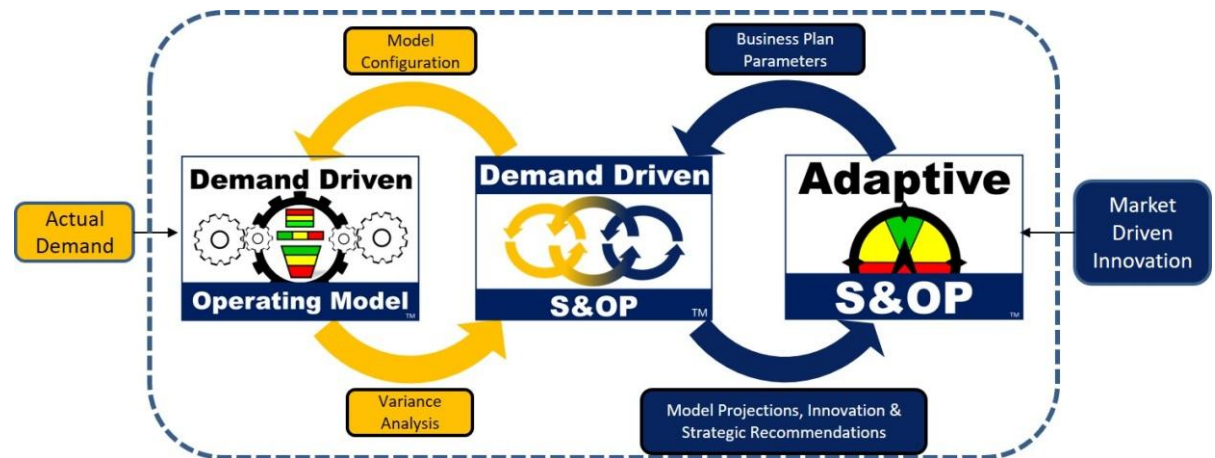
# Early success factors discovery



1. Educated all the key players as a team
2. GM had to be in attendance or no class
3. S&OP is first and foremost a leadership issue
4. Implemented a pilot ASAP
5. Utilized a “Learn by doing” approach
6. **Documenting Assumptions** throughout the process
7. Continuous Self-Assessment utilized

# You do not implement just Adaptive Sales and Operations Planning


1. Implement DDMRP inside the DDOM
2. Implement S&OP Fundamentals
3. Enable DDS&OP
4. Achieve Bi-Directional Communication
5. Become Adaptive





Let's review the  
evolution of  
S&OP

# Definition of S&OP (1980's)



***SALES AND OPERATIONS PLANNING*** is the process with which we bring together all the plans for the business (customers, sales, marketing, development, manufacturing, sourcing and financial) into an integrated set of plans.

It is done at least once a month and is reviewed by senior management at an aggregate (product family) level.

The process must reconcile all supply, demand and new product planning at both the detail and aggregate level and over a horizon sufficient to develop and reconcile financially the Annual Business Plan.

A typical Sales and Operations plan will therefore project at least 18 months into the future. It may be longer in order to adequately plan new product launch, long lead time material planning and manufacturing capacity planning.



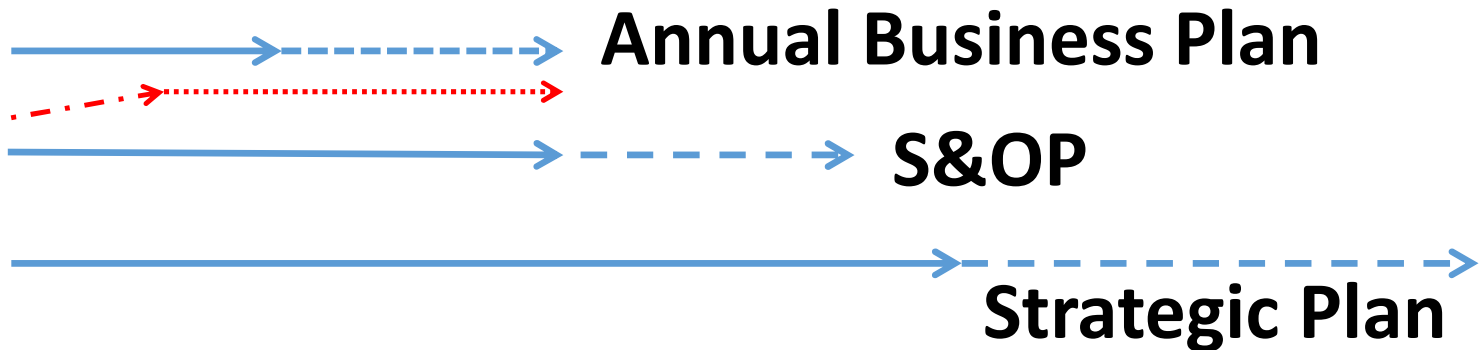
# The S&OP Process



Years 0-----1-----2-----3-----4-----5

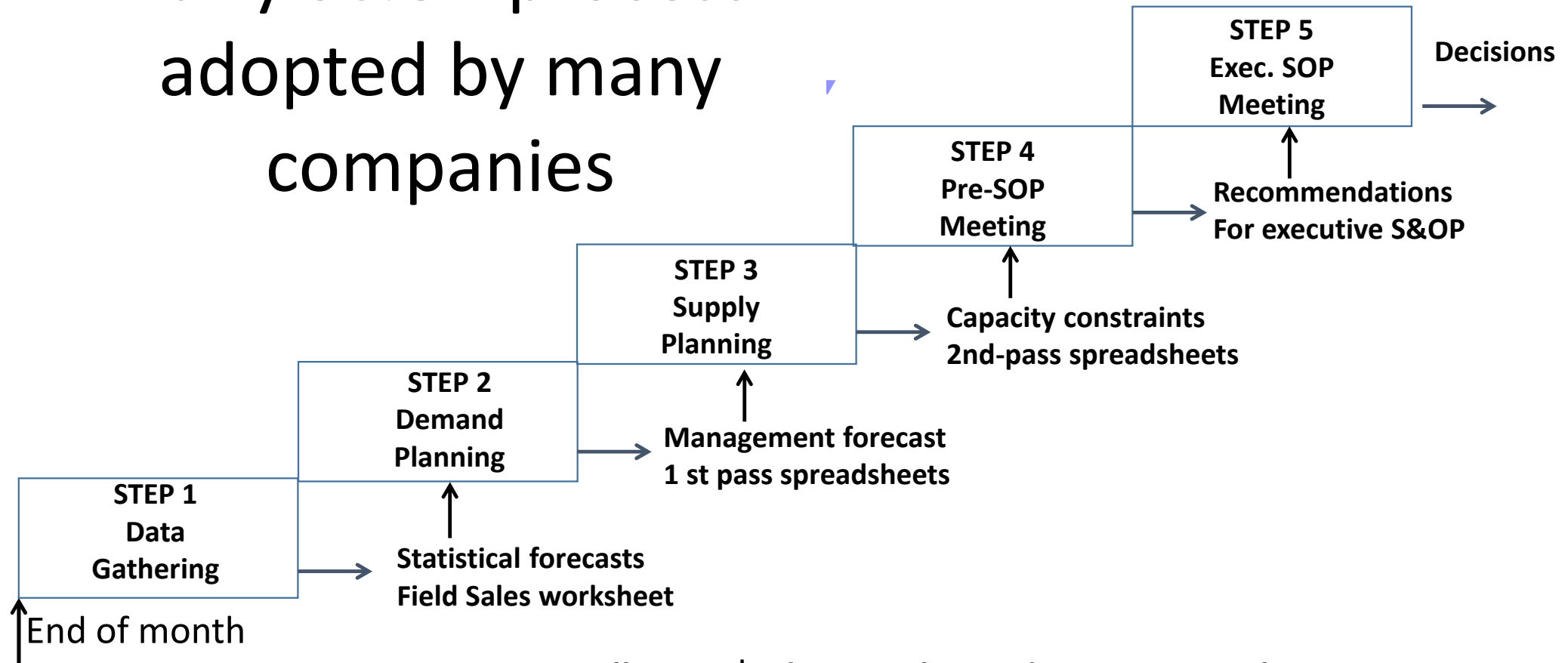
Monthly S&OP Update

*Preparing the  
next year  
Business Plan*

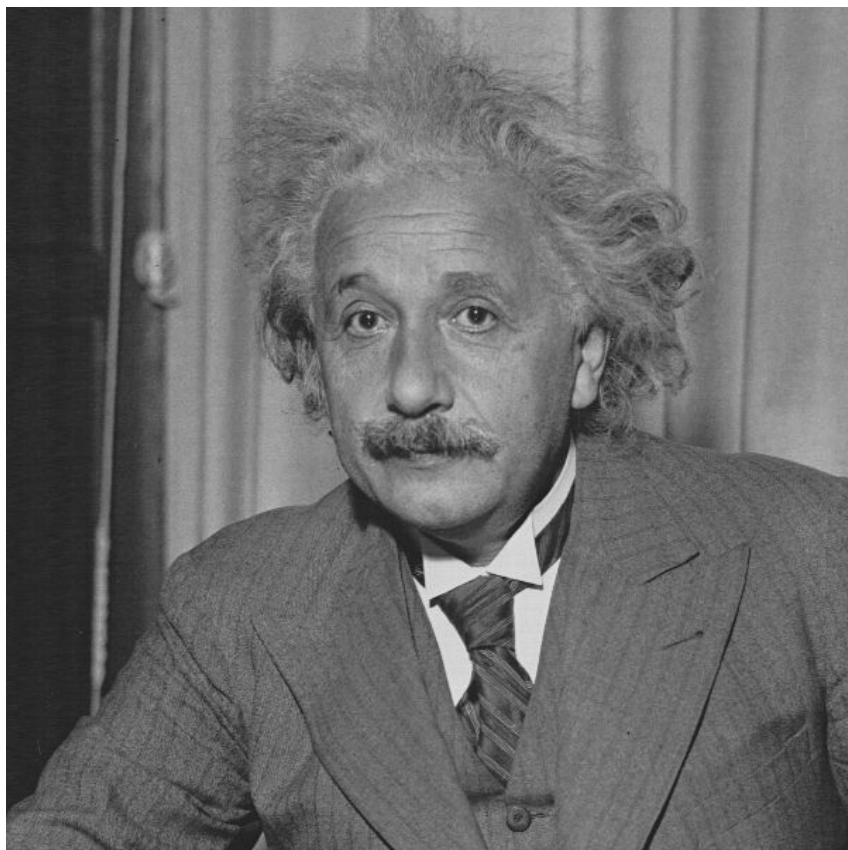


## Where does S&OP Fit?

# Early S&OP process adopted by many companies



Wallace 2<sup>nd</sup> edition Sales and Operations Planning 1992

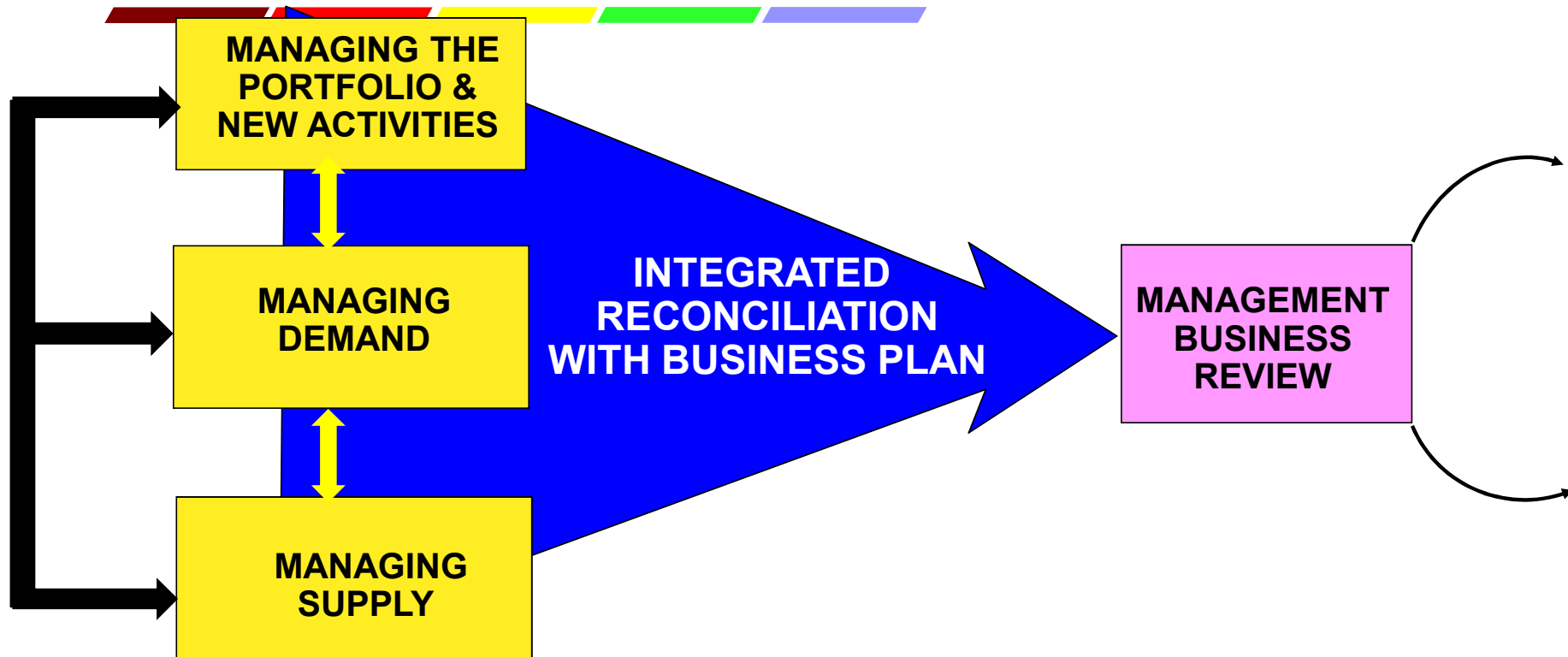


“All models are wrong;  
some are useful.”

Albert Einstein

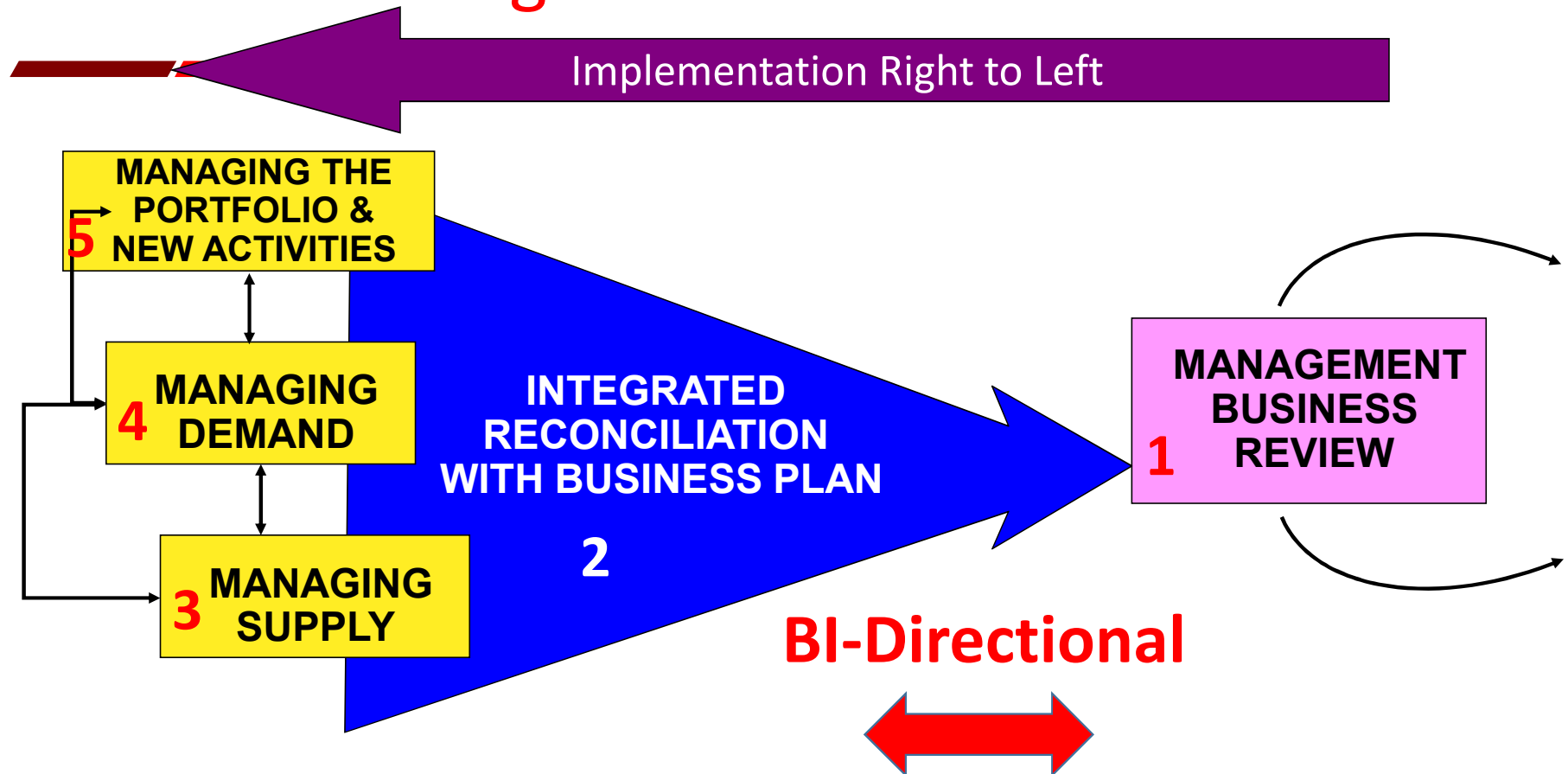
# Sales and Operations Planning - 1995

Ling/Coldrick Model - Left to Right Flow



# Sales and Operation Planning Ling/Coldrick

## Right to Left S&OP-1998





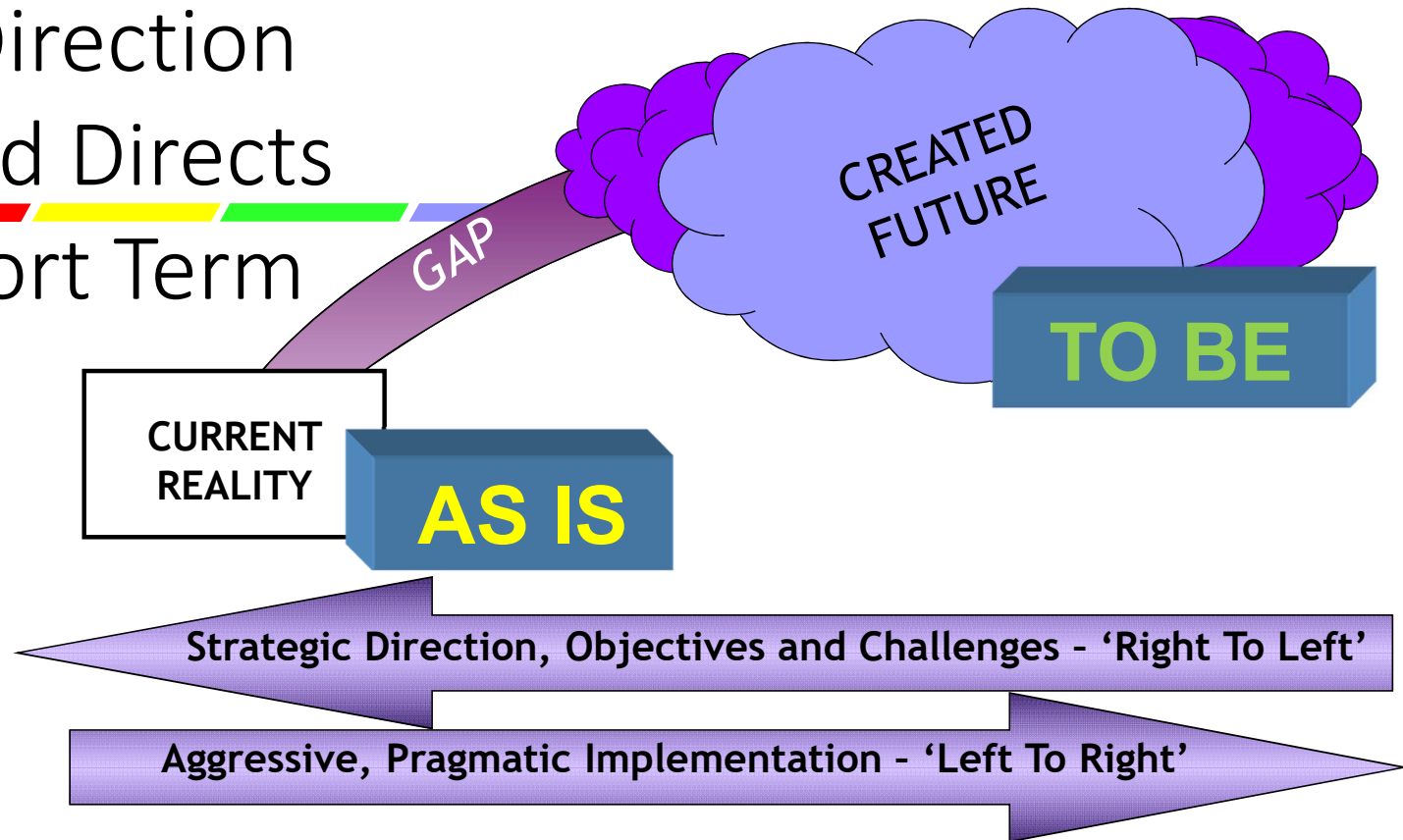
## Bi-Directional

remained an unfulfilled vision until  
Demand Driven arrived on the scene

# Adaptive S&OP Starting Assumptions

1. The future will look different from the past.
2. You cannot understand Adaptive S&OP without an understanding of the Demand Driven Adaptive Enterprise model.
3. The basic difference between managing for flow versus managing for cost is understood by the organization.
4. The organization has at least a partial flow-based operating model in place.
5. The organization will develop the capability and personnel to perform tactical reconciliation activity against its flow-based operating model (DDS&OP activities)
6. Understanding that Information should be roughly right rather than precisely wrong. (Relevant information and range)
7. Understanding of the 7 elements of Adaptive S&OP
8. Adaptive S&OP is done best by starting with the end in mind.

# Strategic Direction Defines and Directs Long & Short Term actions



## *The Stockdale Paradox*

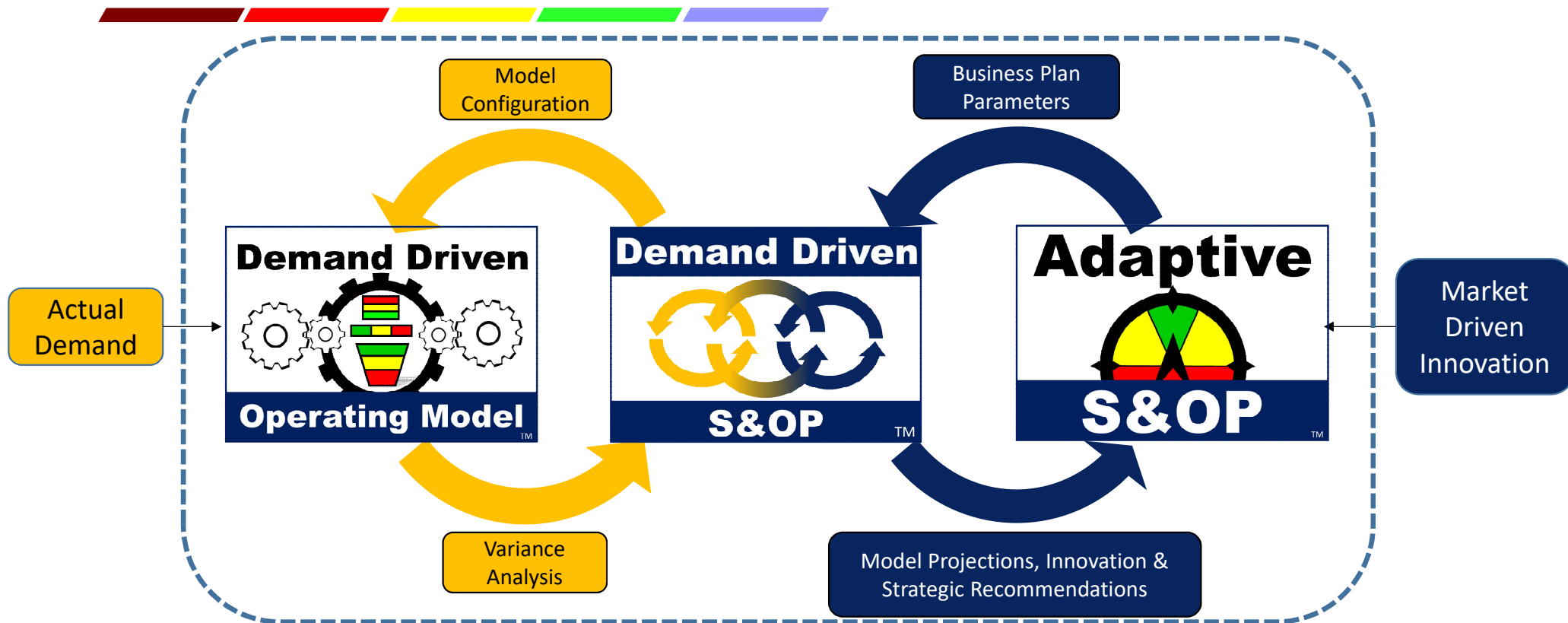
*"Retain faith that you will prevail in the end, regardless of the difficulties.*

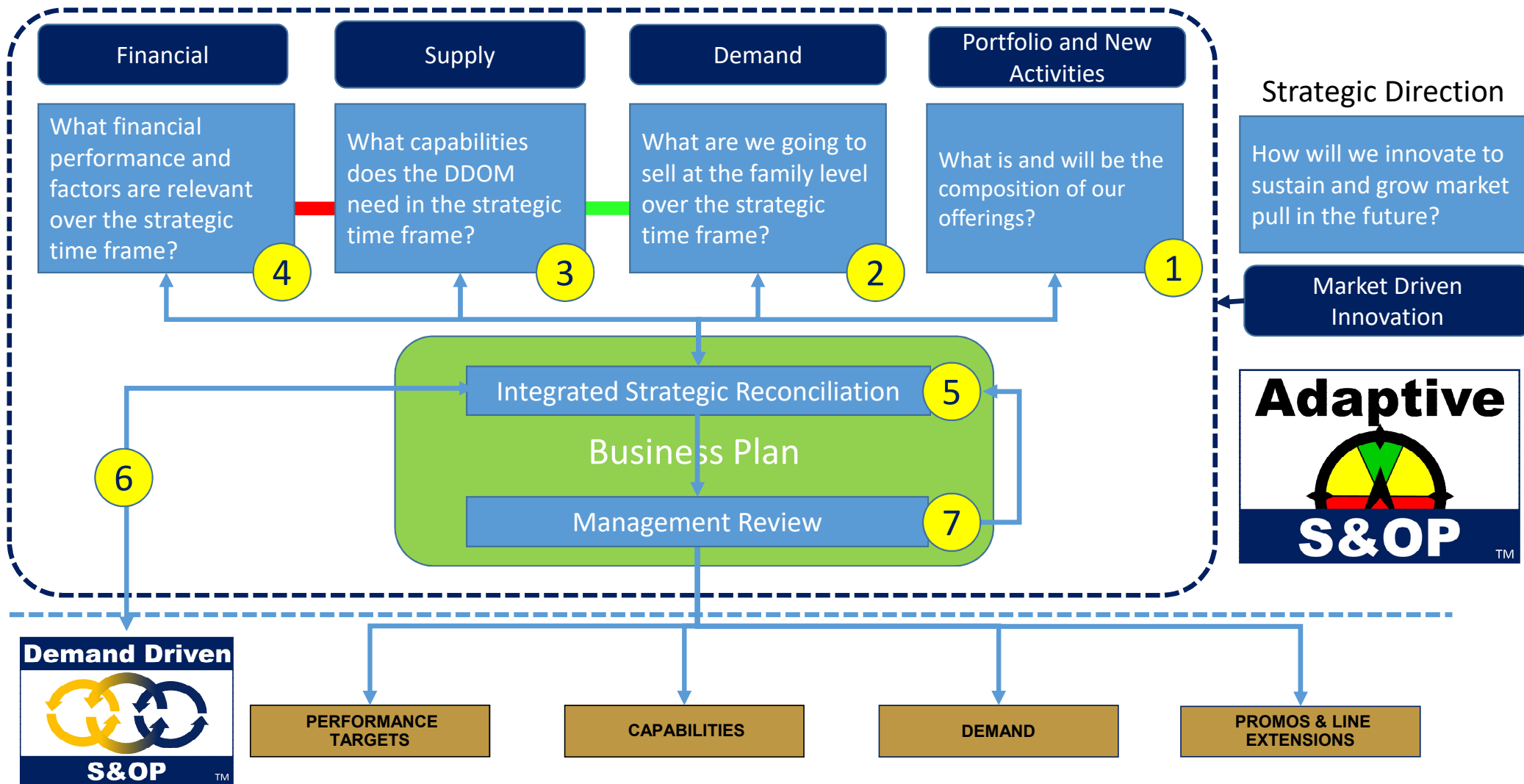
*And at the same time, confront the most brutal facts of your current reality,  
whatever they may be. "* James Stockdale

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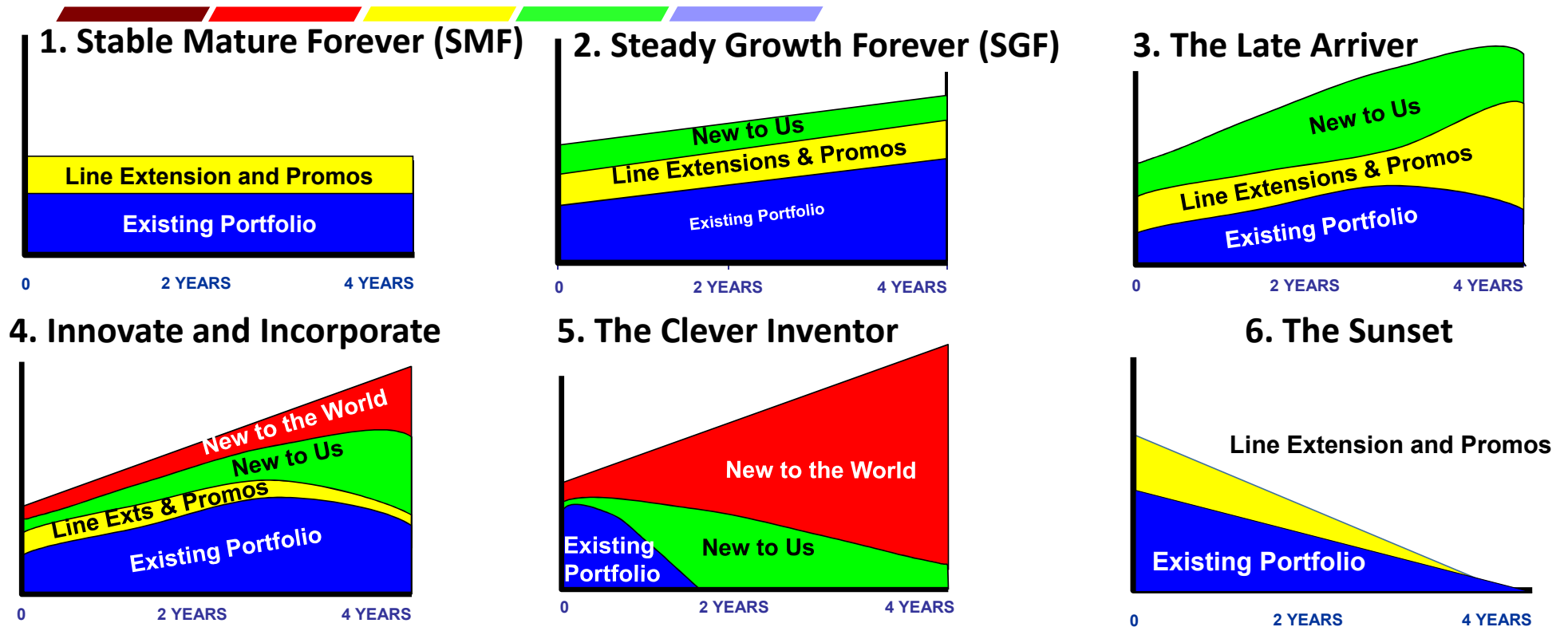


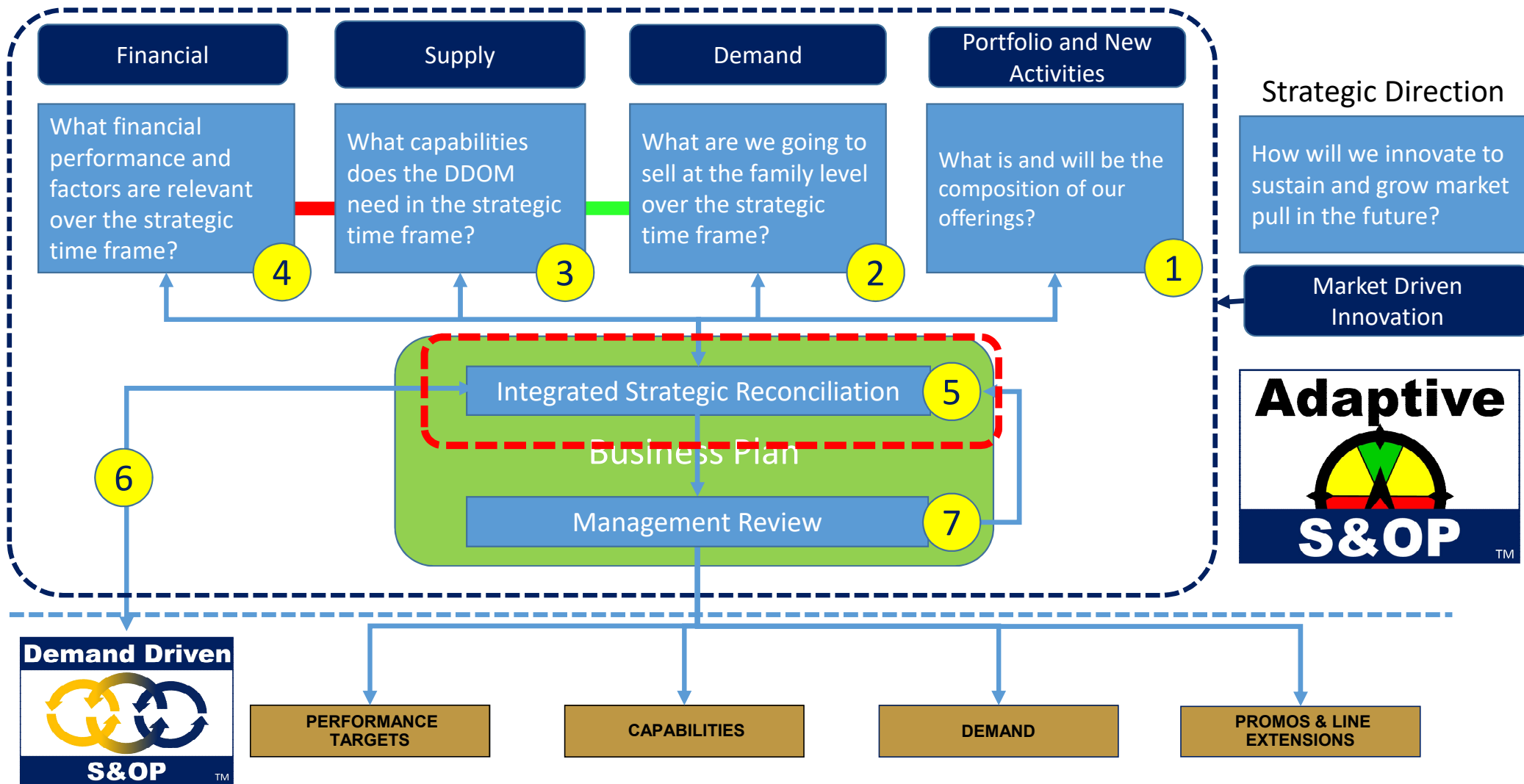
# Demand Driven Adaptive Enterprise Model



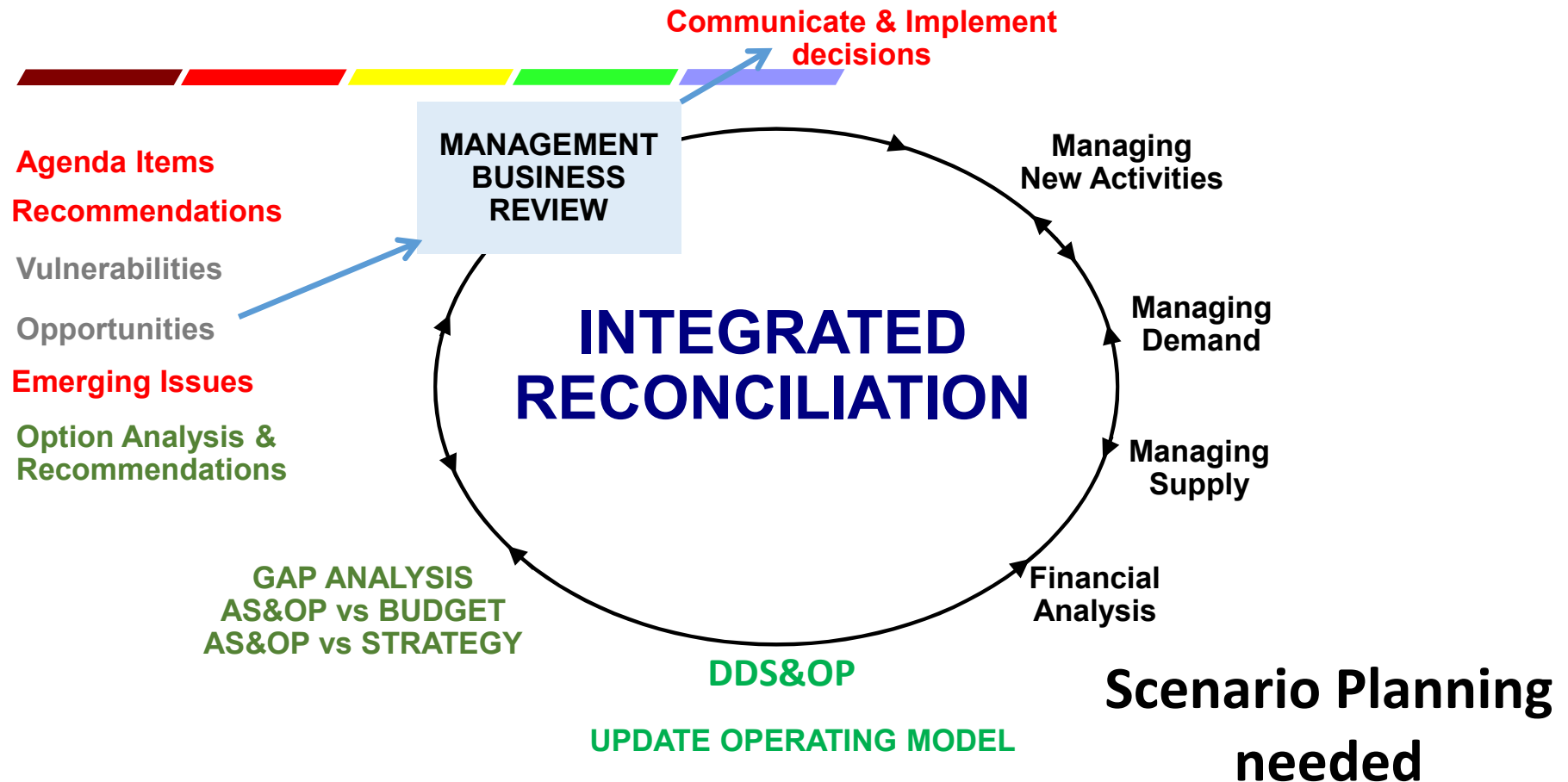


# Possible Future Portfolio Models






# Elements of Integration

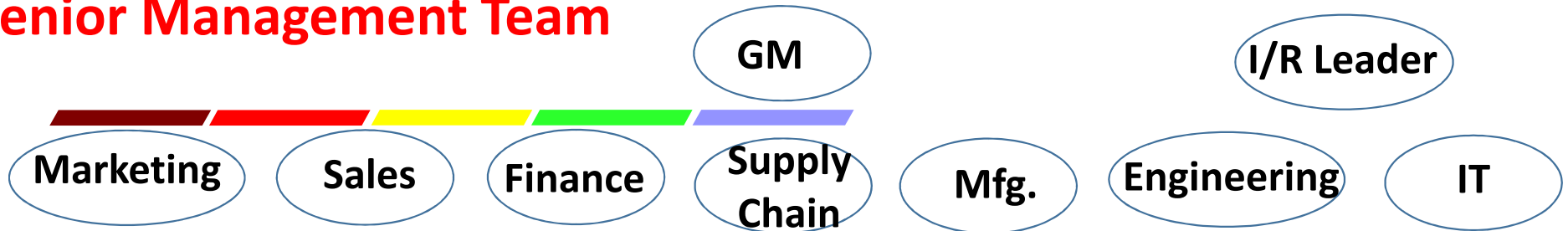


# Integrated Reconciliation Team Needs

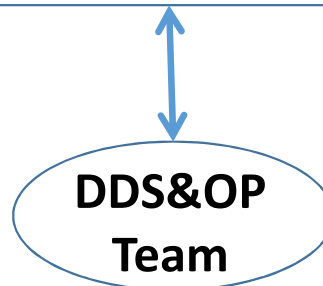
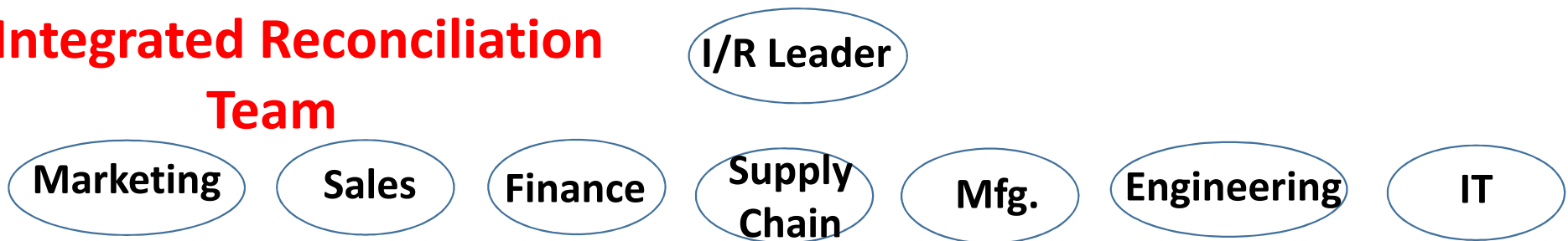
- 
- Empowered by Senior management to make decisions in the tactical range
  - Participate in and enable & align strategy with operations-Operating Model - DDS&OP
  - Facilitate the **cross functional** collaboration that enables S&OP to work effectively
  - Guide the development of issues, opportunities and decisions required
  - Shape the Senior Management Review Meeting agenda

Which means that  
The Senior Management Review will get the right information at  
right time to make the most informed decisions

## Senior Management Team



## Integrated Reconciliation Team



Preparing information for the Management Business Review --  
Volumes, Financials and the Story in One Sheet or Screen  
Use graphics wherever possible

## Ongoing Planning Assumptions

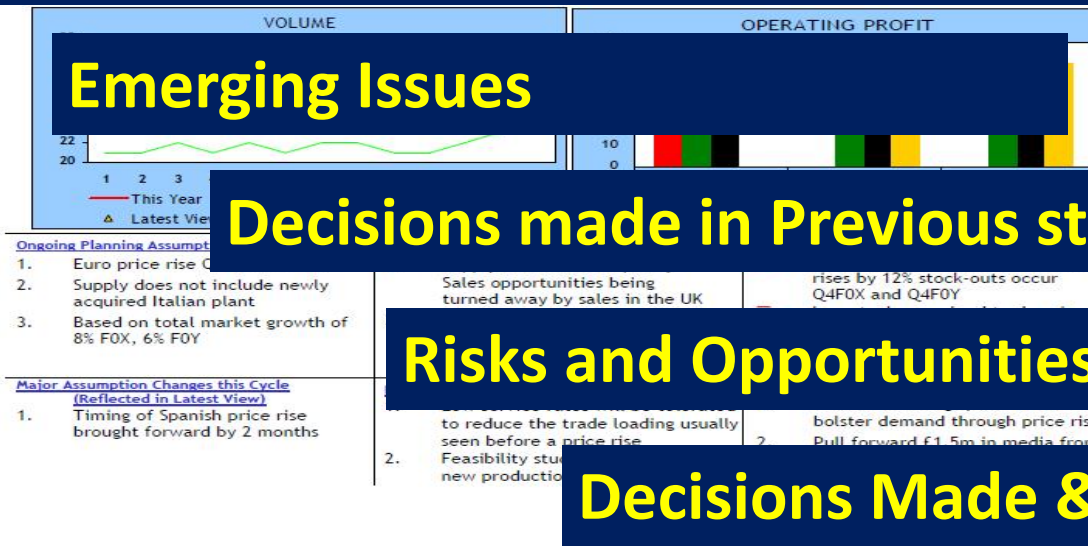
## Major Assumption / Changes In this Cycle

## Emerging Issues

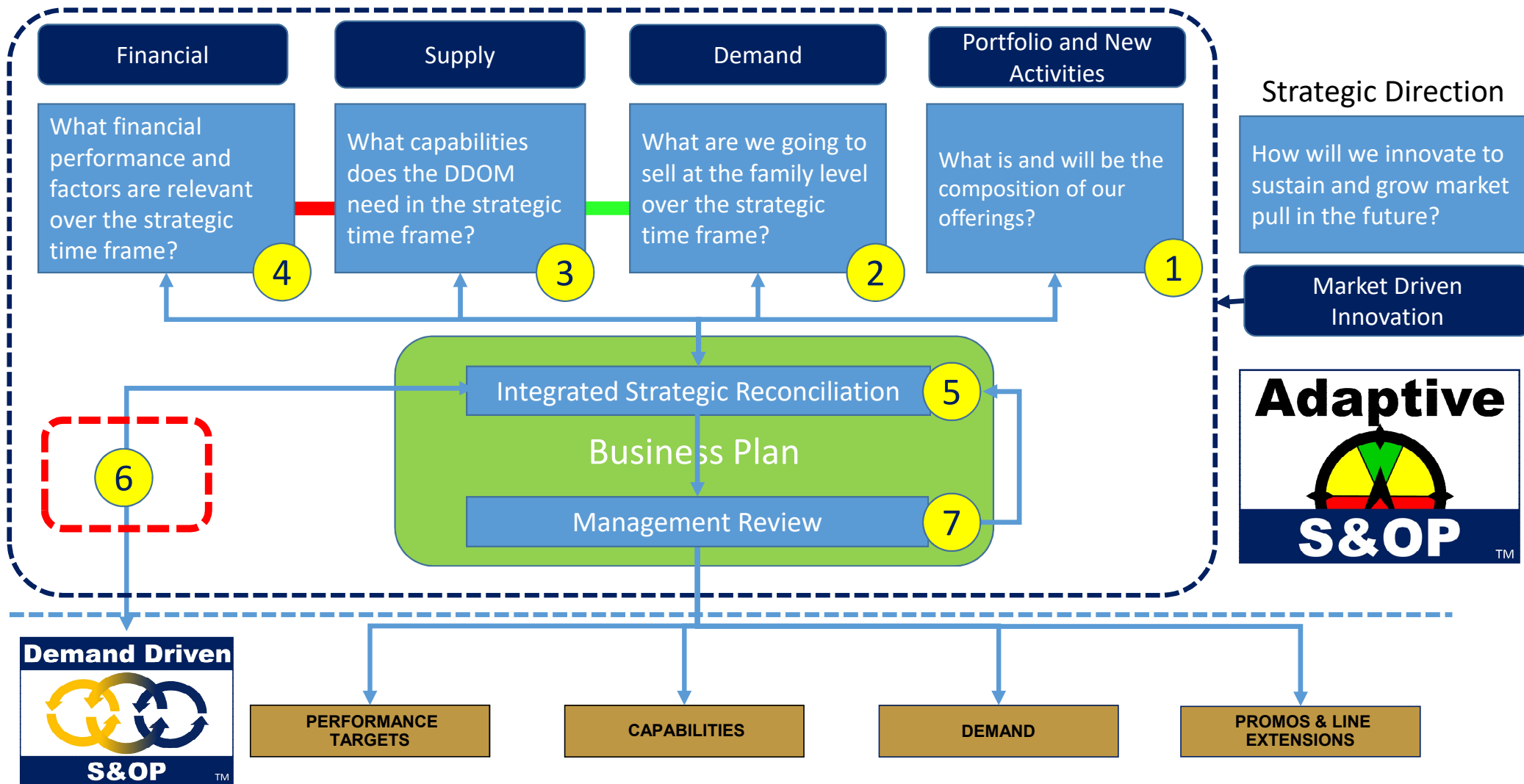
## Decisions made in Previous steps

## Risks and Opportunities

## Decisions Made & Required








# Capability Master Settings



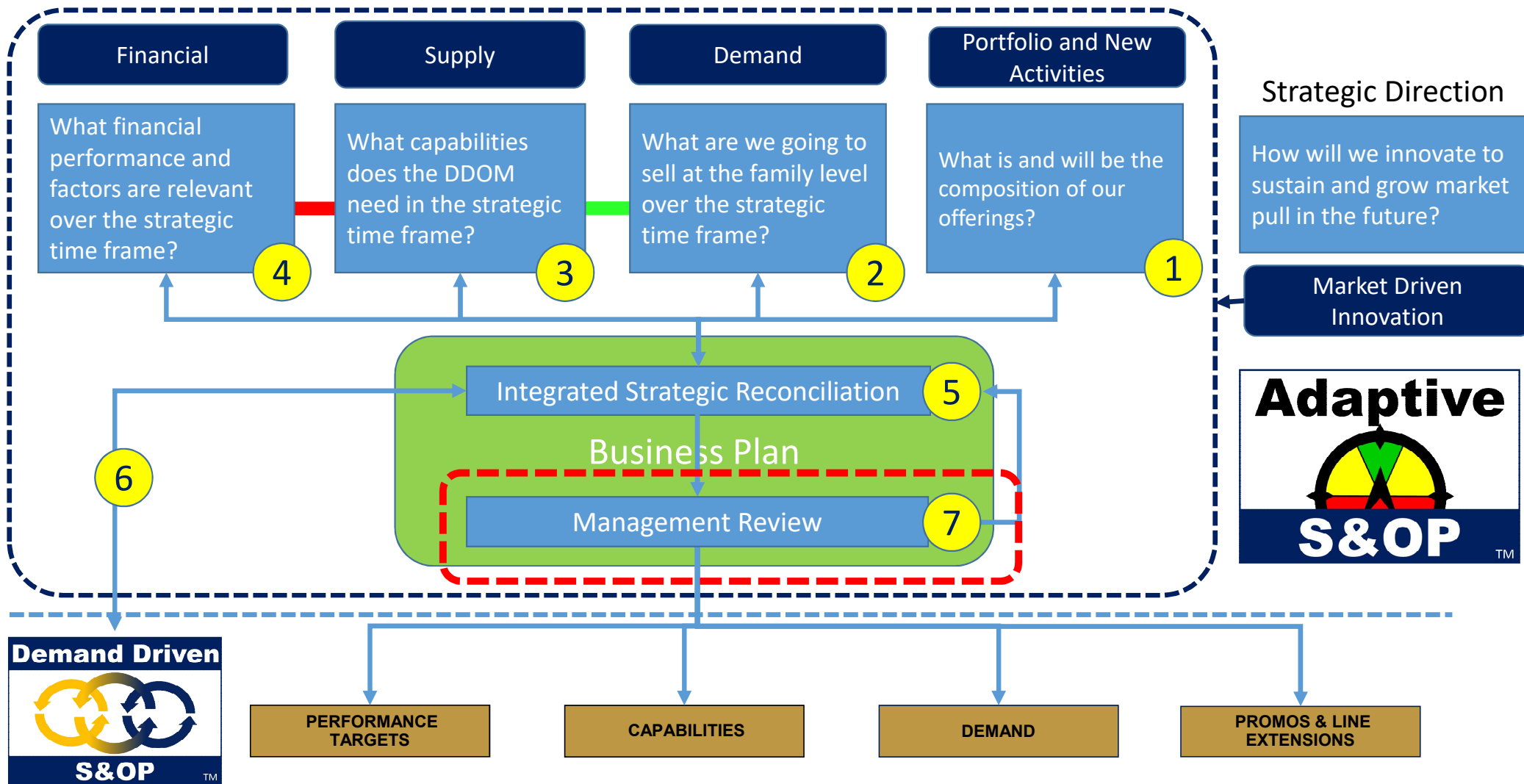
- New product introduction
- Seasonal fluctuations
- Major promotion
- Anticipated change up or down in demand
- Requires special input parameters to the DDOM

# The Master Schedule is Gone

  
The function of the Master Scheduler still exists. This person can now be called:

1. DDS&OP Coordinator
2. Master Settings Manager
3. DDOM Manager
4. Tactical Manipulator
5. Master Buffer Manager

**This is a critical function**

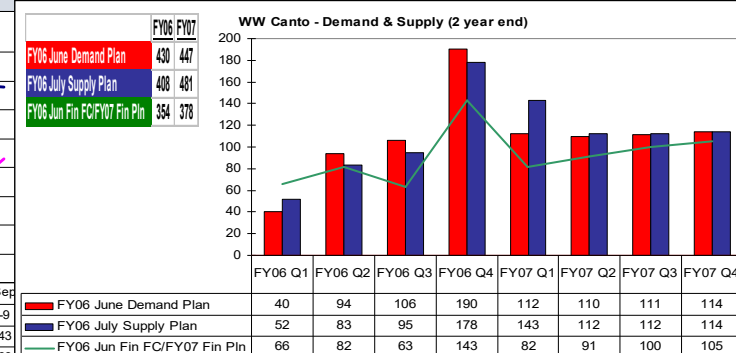
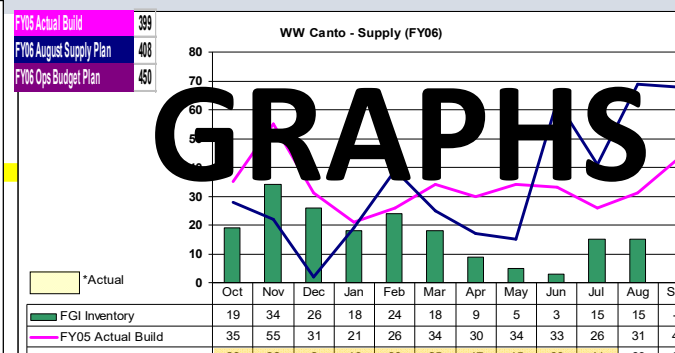
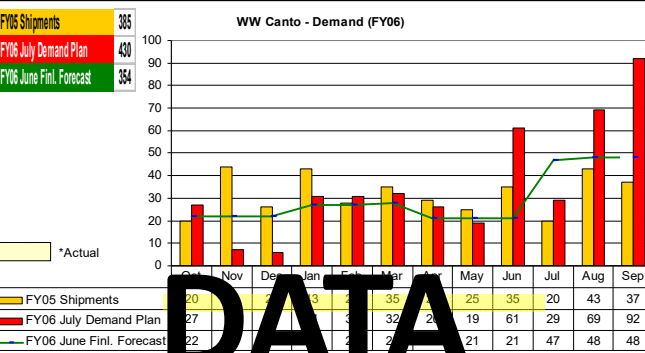


# Product Family: WIGITS I & II

Sample

## GRAPHS

## DATA



### Major Assumptions (In Data)

#### 1. Wigit II Launch schedule

- US IVD Clearance – estimated Sep 06
- Japan Registration approved to sell Canto II in August.
- China and Taiwan registration estimated by end of FY07

- #### 2. Based on current inventory and open purchase orders the assumption is that the current Wigit supply will satisfy current demand

### Risks and Opportunities (not in Data)

1. High volume for Wigit lines still causing serious constraints in test.
2. Chassis availability for Wigit II is still an issue. Supplier concern about meeting current requirements for September.

### Emerging Issues and Gaps (In Data)

1. Wigit II mix is still not stable and could create supply issues.
2. Production still unable to meet plan. Production resources will be stretched in September.

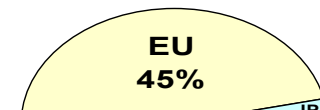
### Major Changes this Cycle (In Data)

### Decisions Made During this Cycle

1. Strategy about Wigit II Demo units is that new builds will take priority unless otherwise defined by US Sales and Marketing leadership.

### Decisions Required - Recommendations & Costs

1. For the remaining Wigit II Demo units we need to decide if additional material be purchased for remanufacturing.



What is shown in red is what has changed since last month

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FY06



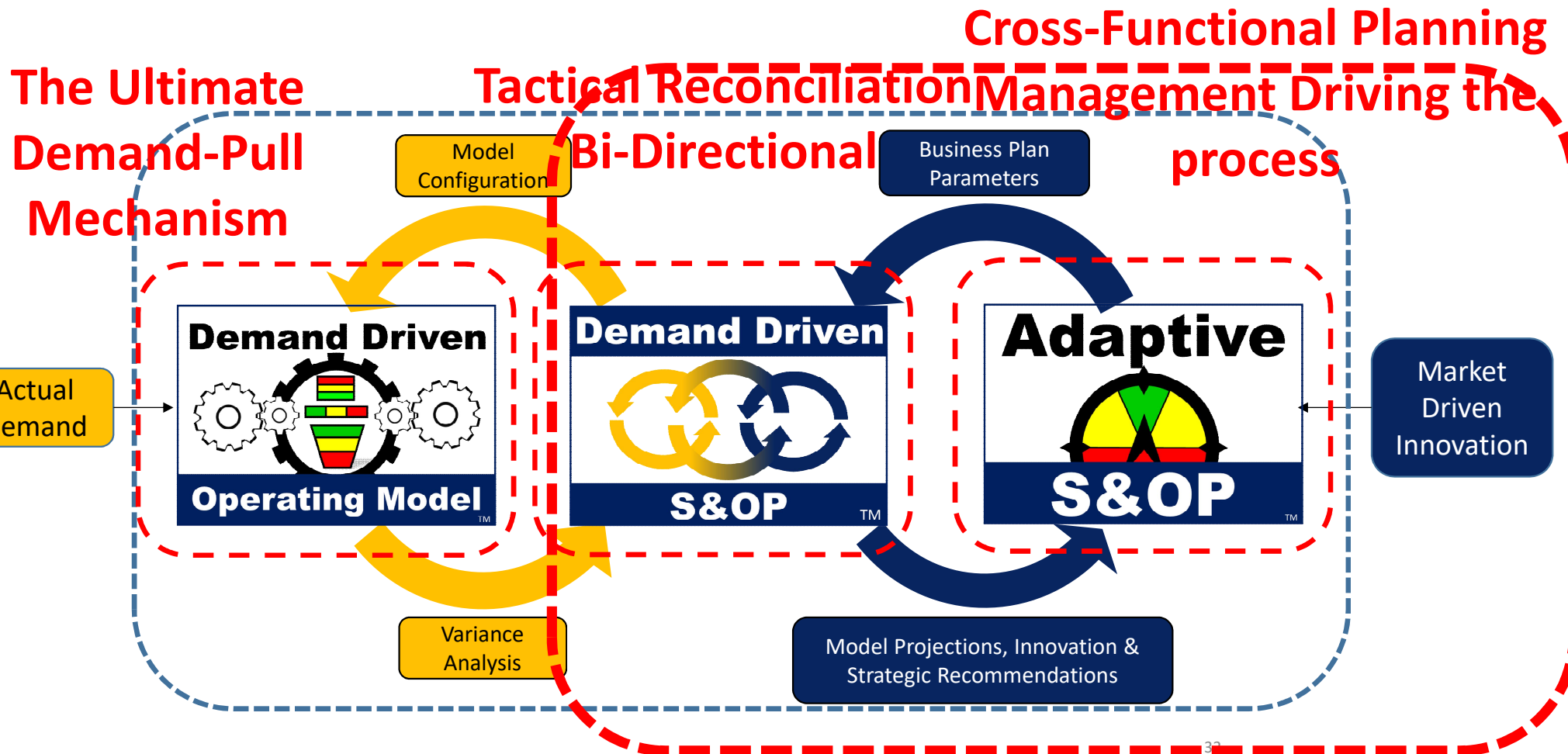
# Updated Definition of Sales and Operations Planning 2017

# Sales and Operations Planning



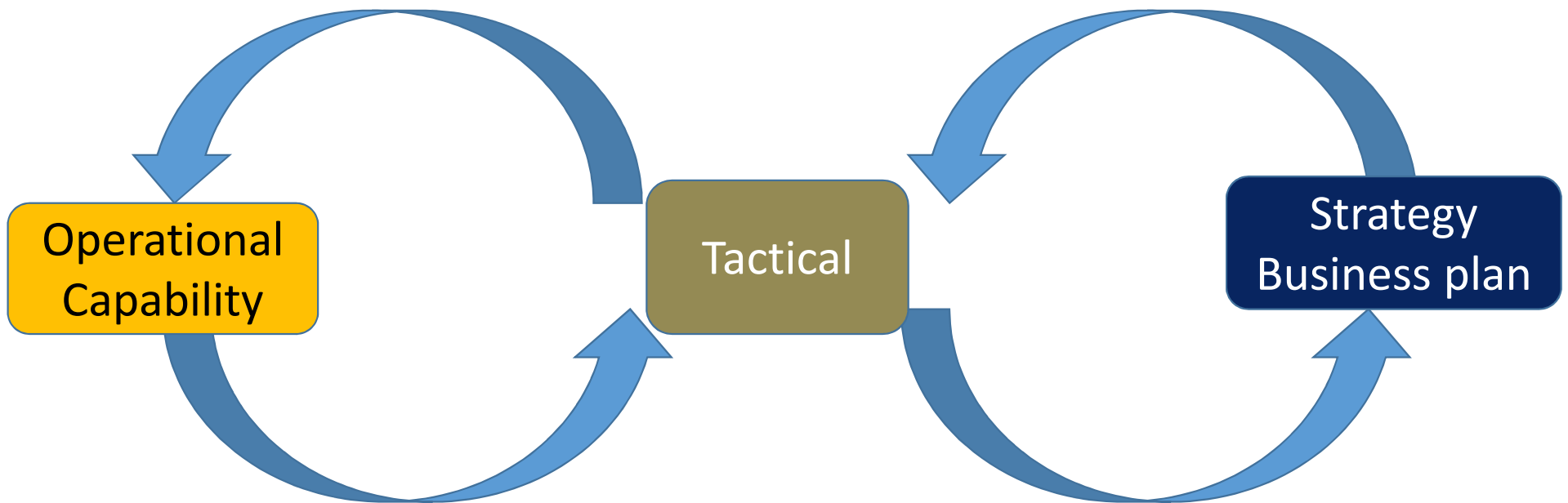
Sales and Operations Planning is the integrated business process that provides management the ability to strategically direct its businesses to achieve competitive advantage on a continuous basis by the protection and promotion of return on investment. Product innovation, customer focused marketing plans for new and existing products, operations strategy and the financial strategy are managed on a continuous basis by an integrated reconciliation team to enable the company to sense, adapt and innovate successfully across the supply chain.

# Demand Driven Adaptive Enterprise Model





# Seamless Connection



# What is the Future of S&OP?



- The future is bright indeed
- It should be an integral part of a Demand Driven Adaptive Enterprise
- Where Management makes decisions and drives the business
- Enabling a company to become truly adaptive

# Thank You



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