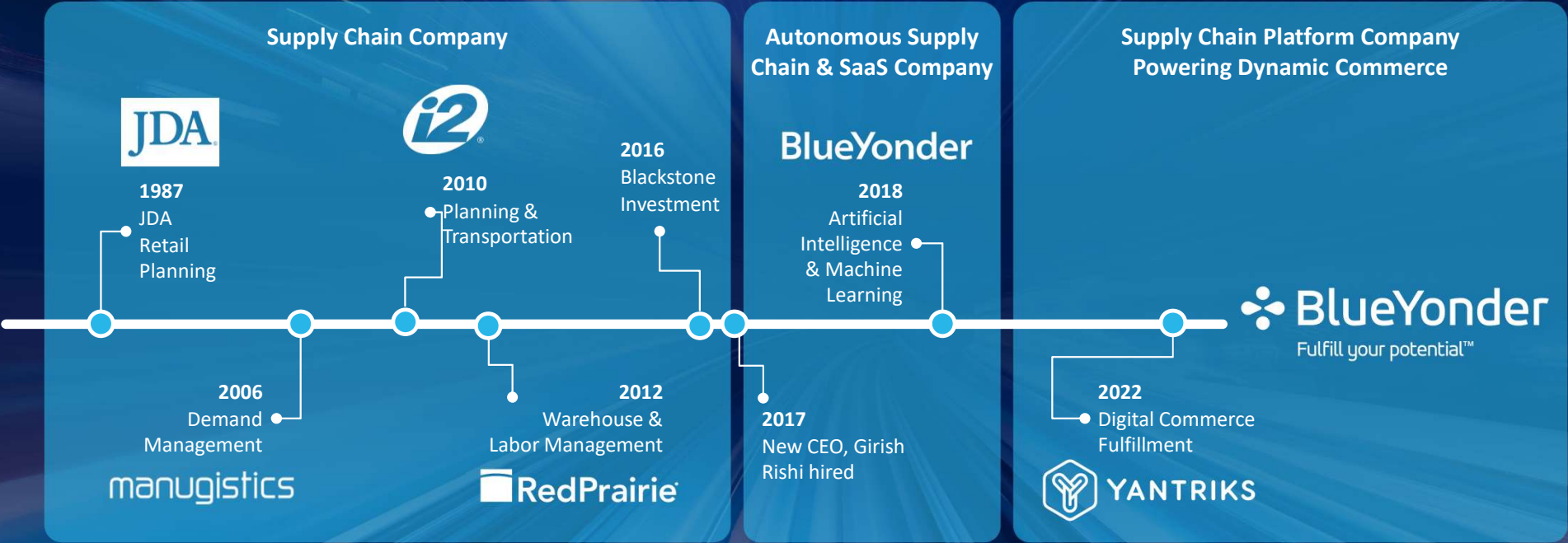




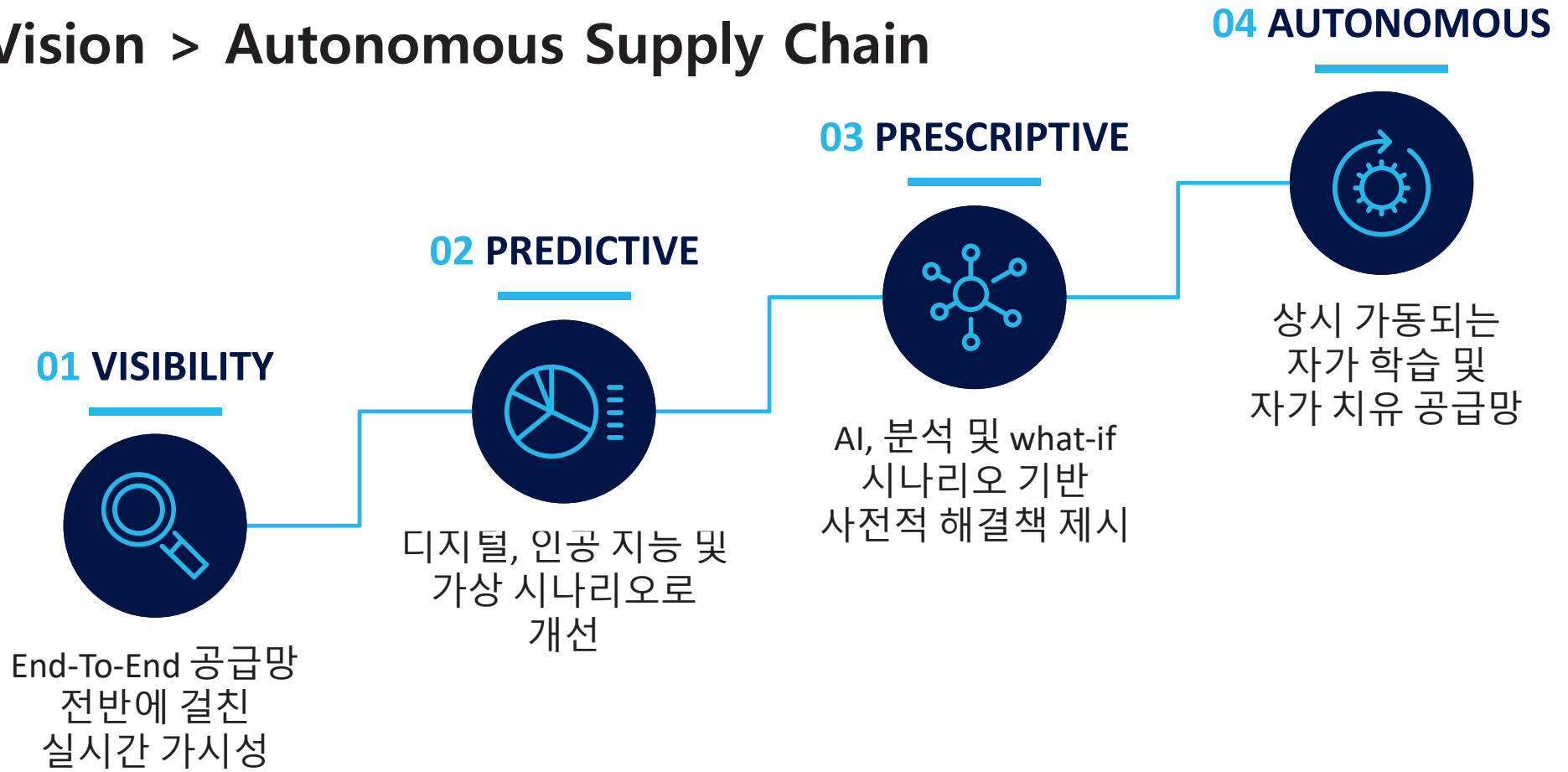
BY Autonomous Business Planning > A Re-Imagined Future of S&OP/IBP Processes



Blue Yonder Re-Introduction



Vision > Autonomous Supply Chain



Infra / Platform / Solutions

One Data | One Experience | One Ecosystem

Blue Yonder Applications

Ecosystem Applications



Planning



Logistics



Commerce

Developed by Partners

Developed by Customers



Integration & APIs



User Experience



Control Tower



IoT



Data Mgmt.



Workflow & Orchestration



AI / ML




Analytics & Insights




Platform



Challenges



수요/판매계획이
공급/ 운영계획과
일치가 어려움



가용한 옵션을 시뮬레이션하고
트레이드오프를 신속하게
평가하는 능력 부족



재무 관점에서의 정보 전환
어려움



문제 해결 규율 부족

각 조직간 합의가 어려움

문제를 식별하고 평가하거나
변화에 대응하고 영향을 파악하기가
쉽지 않음

S&OP

vs

IBP



Objective

Volume oriented Demand & Supply balancing



Focus

Internally focussed



Owner

Driven by Supply Chain



Features

Supply chain modeling and scenario planning



Connectivity

Connection between internal organization system
Aggregated/Disaggregated information

Challenges from S&OP

- 재무 조직과의 협업
- 공급망 KPI(OTIF, DOH)가 아닌 재무 KPI(EBIT, 수익, 비용, 마진)
- 상업적 목표 고려: 시장 점유율/성장, 채널, 영향력
- 신제품 소개(NPI)의 비즈니스 영향을 극대화하기 위해 신제품 관리 포함
- 하나의 숫자 계획에서 위험 및 기회 관리로의 초점 변경
- 데이터에서 통찰력으로
- 주요 고객 및 공급업체 참여

S&OP

vs

IBP



Objective

Volume oriented Demand & Supply balancing

+

Value based delivery of financial business objectives



Focus

Internally focussed

+

Extended to collaborate with Supplier/Customer



Owner

Driven by Supply Chain

+

Sponsored by Exec Management
Driven by the Commercial / Finance organisation



Features

Supply chain modeling and scenario planning

+

- Financial impact analysis and planning including Risks & Opportunities evaluation
- Project planning support for new product introduction (NPI), product reviews and transformational projects
- Commercial alignment



Connectivity

Connection between internal organization system
Aggregated/Disaggregated information

+

Boundaryless and connected to execution (S&OE)
and long term strategy – Business Planning level “steering”
of the company based on real-time signals and insights

Expected Business Outcomes Drives Investment & Actions

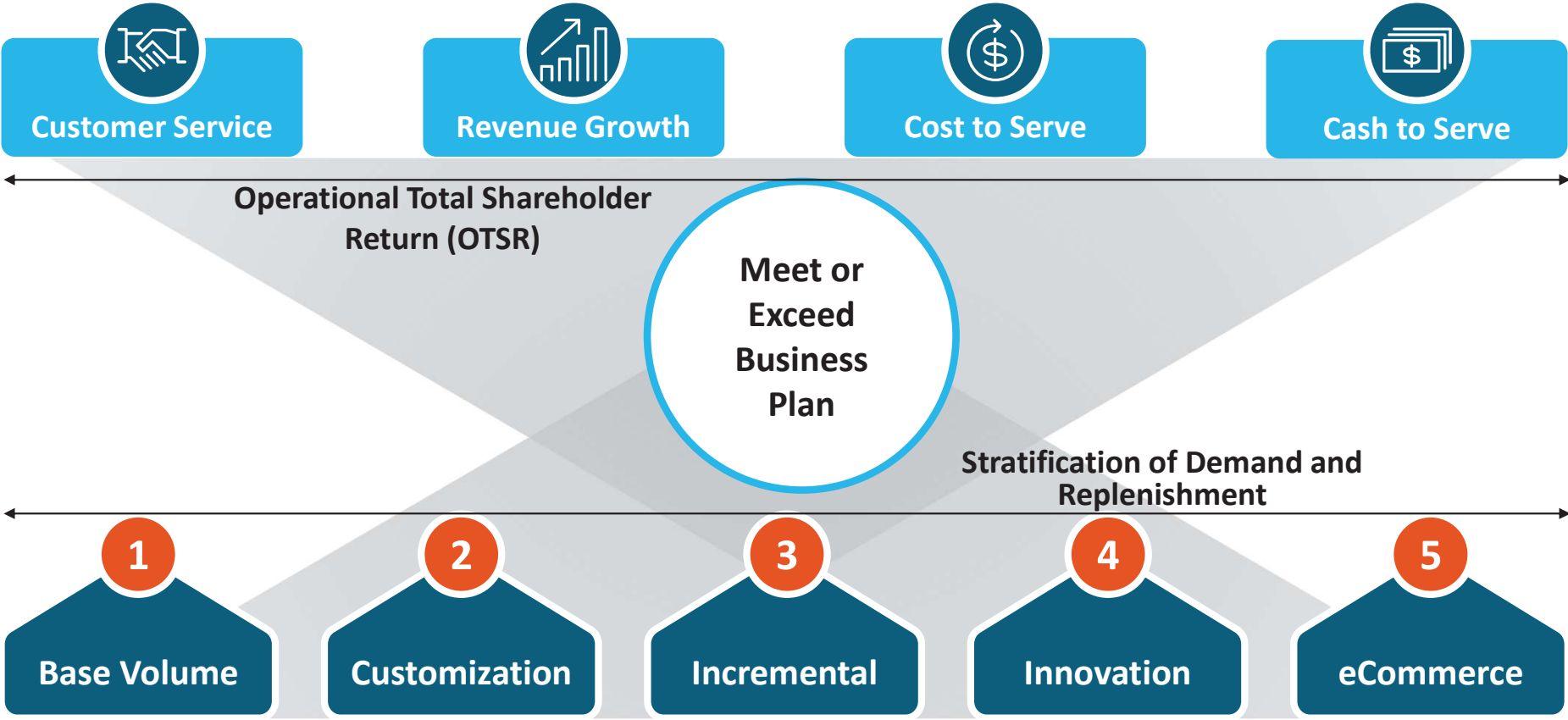


Illustration of Base and Customization

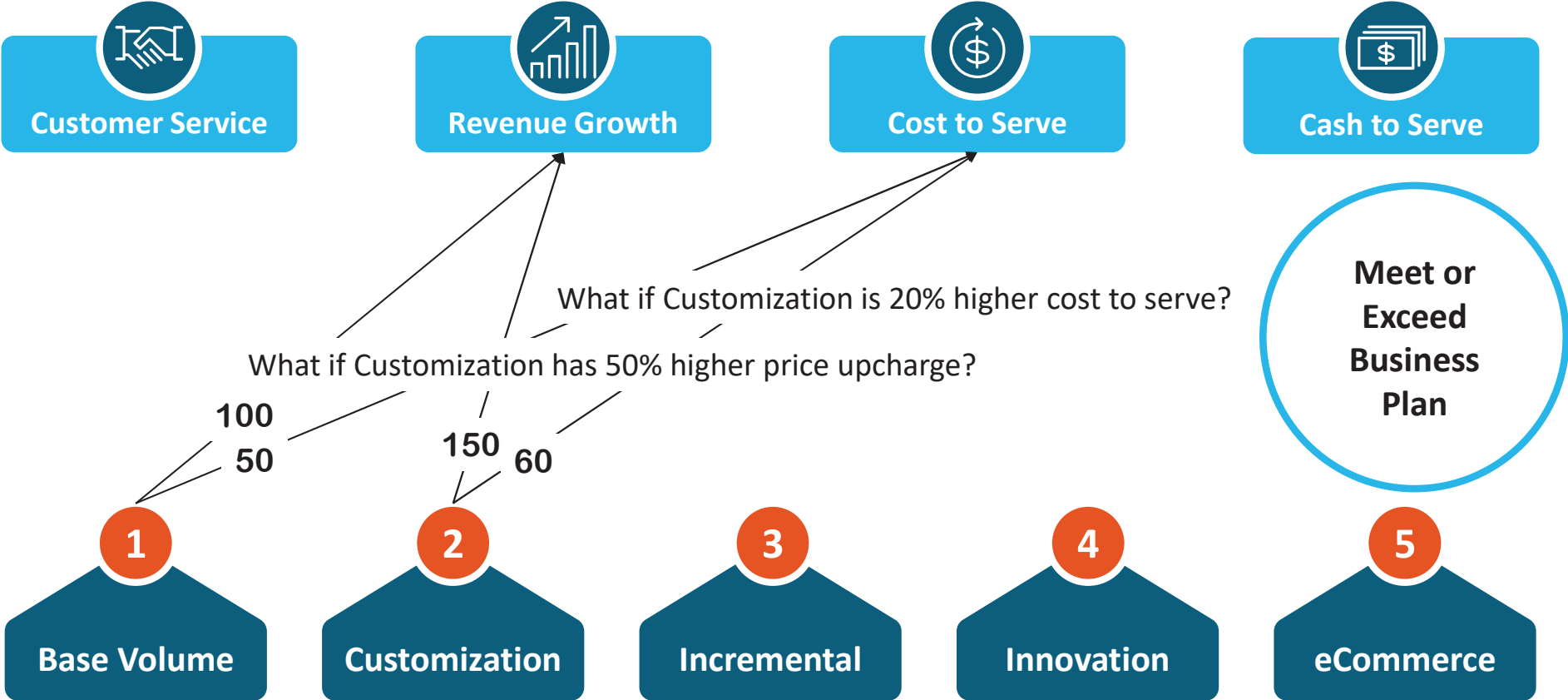


Illustration of Incremental and Innovation



Illustration of Incremental with OTSR goals



The 3 Most Burning Problems of IBP Processes



**BUSINESS
ASSUMPTIONS**

**SCENARIO
PLANNING**

**EXECUTIVE &
PLANNER
ALIGNMENT**

Gartner® Agrees - Four Key Barriers to Incorporate Risk & Opportunities in S&OP/IBP

We don't know **where to start** identifying risks and opportunities

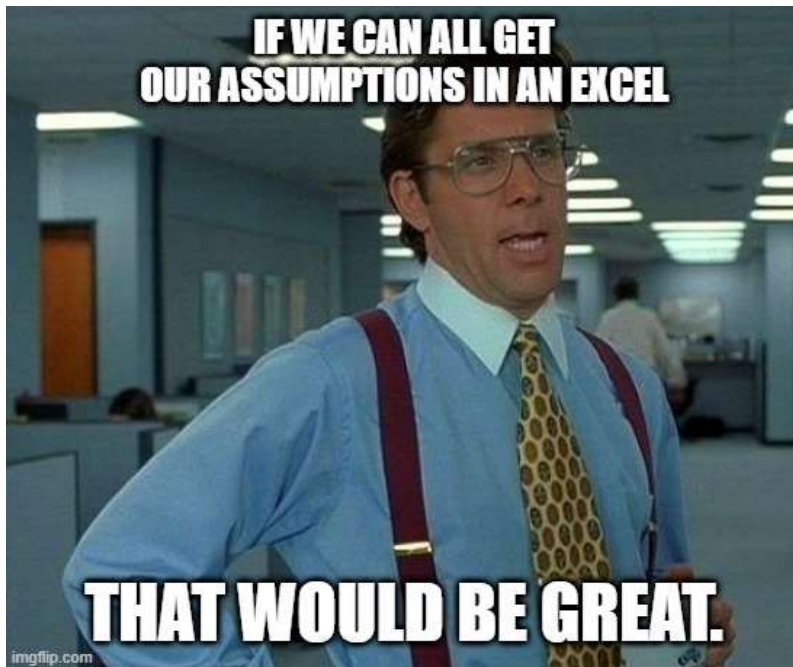
We struggle to use risks and opportunities to **drive decision making.**

We do not have the **technology** to support scenario planning

We evaluate **too many scenarios**, and they never happen



Business Assumptions are known, but **not captured early enough**



- 조직에는 위험과 기회를 투명하게 만들고 완화/강화할 수 있는 문화, 프로세스 및 도구가 부족합니다.
- Planner는 미래의 위험과 미래의 기회에 대해 미리 가정합니다.
- 비즈니스가정은 처음에 합산된 수준의 추측이며 디지털로 확보하기 어렵습니다.
- 모범 사례: 파워 포인트 및 엑셀에 캡처된 비즈니스가정
- 최악의 경우: 완화 결정이 SCM/ERP에 너무 늦게 입력됨



Scenario Planning is very unproductive & error prone activity



- 비즈니스가정이 충분히 명확하면 경험 많은 Planner가 시나리오를 만들고 동료들을 초대하여 시나리오를 생성하고 결정합니다.
- 하나의 시나리오에 대한 생성, 협업, 비교 및 승인에 많은 시간이 소요됨
- 모든 시나리오 편집은 수작업이며 계획 엔진에서는 부정확성이 발생합니다.
- 계획자는 하위 시나리오를 만드는 다른 계획자를 포함합니다.

According to Gartner: 'when companies have technologies to build scenarios, they evaluate too many scenarios or too few, and they never happen'



Executives are not onboarded early enough in the decision cycles, resulting into unmet opportunities & expedite costs

BRACE YOURSELF



- 경영진에는 **현재정보에 기반한 실시간 재무 대시보드**가 있지만, 미래에 대한 정보는 미래를 제대로 반영하지 못하고 있습니다.
- 회의전에 위험 및 기회 및 제안된 시나리오를 설명하는 **ppt 또는 Excel 보고서**를 받습니다.
- S&OP/IBP 코디네이터 및 계획 관리자는 종종 이러한 보고서를 **수집/통합하고** 수작업으로 재편집해야 합니다. 예로 50-100 슬라이드 5-20명.
- 가장 좋은 경우는 ERP 또는 SCM 솔루션상의 레포트입니다.
- 회의 중에 경영진은 다양한 가정 및 신뢰 수준을 기반으로 **새로운 시나리오**를 요청합니다. 효율성의 문제가 재발합니다.



IMAGINE IF

Business assumptions are digitally captured and curated ahead of time

Scenario Planning in Autonomous

Executive simulate their P&L based on risks and opportunities



Imagine If Risk & Opportunity are digitally captured & curated ahead of Time



IBP

IBP Process

Insights (17)

- 1 minute ago
Revenue gap in shirts category... 96%
Gap against AOP is out of bounds.
Source: BY
- 1 minute ago
Future revenue Silver launch so... 78%
We have a unique opportunity to sell 1m to 1.3m bottles this year.
- 1 minute ago
Revenue risk detected in last... 78%
Price elasticity study suggests that a price drop of 33% may provide a sales uplift up to 110%.
Source: BY
- Yesterday
Commodity prices are expected... 78%
Explore options to hedge risks.
Source: BY
- Yesterday
Slow-moving inventory & price... 77%
Evaluate NPI & mix refresh to change market sentiment.
Source: BY
- 1 day ago
Innovation initiative are expect... 60%

Future revenue Silver launch south Europe

Insight

Type	Confidence	Priority	Created by	Approved by	Approval Date
OPPORTUNITY	78%	High	Ellie	John	05/17/2022

No Response Defined See Response for more details.

Opportunity	Impact	Response	Outcome
Scope			
Product	Silver		
Market	Italy, France		
Source	Plant 1, Plant 2, Plant 3		

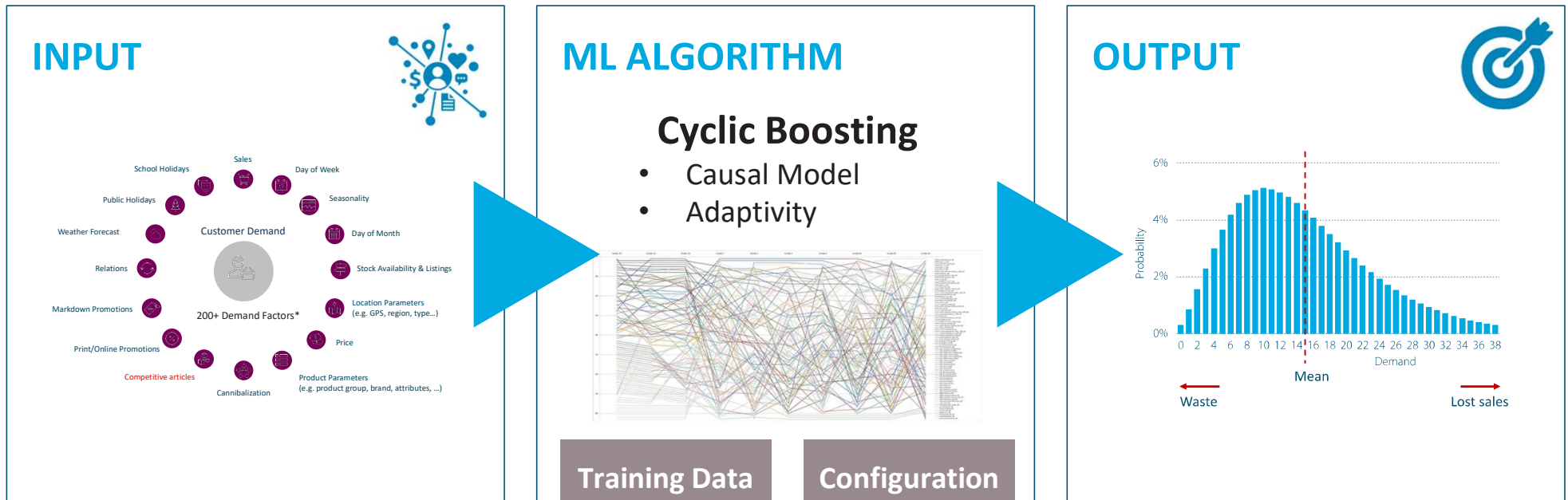
Projected Revenue Funnel

Revenue (\$ millions)

Quarter	Revenue	Long term projection	Mid term projection	1.3m hl opportunity
Q1 2022	0			
Q2 2022	~220	~250	~250	~300
Q3 2022		~300	~300	~350
Q4 2022		~350	~350	~400



AI/ML forecasting takes >200 cross-correlated factors into account to calculate probabilistic forecasts



- Over 200 cross-correlated factors (sales, prices, promotions etc.)

- Demand Forecast (Sales Quantity) on a Product/Store/Day level
- 21/365-day horizons





Future revenue Silver launch south Europe

Assumption

New

Open in Planning Space

Type	Confidence	Priority	Created by
OPPORTUNITY	78%	High	Ellie

No Response Defined There is a missing response.

Opportunity

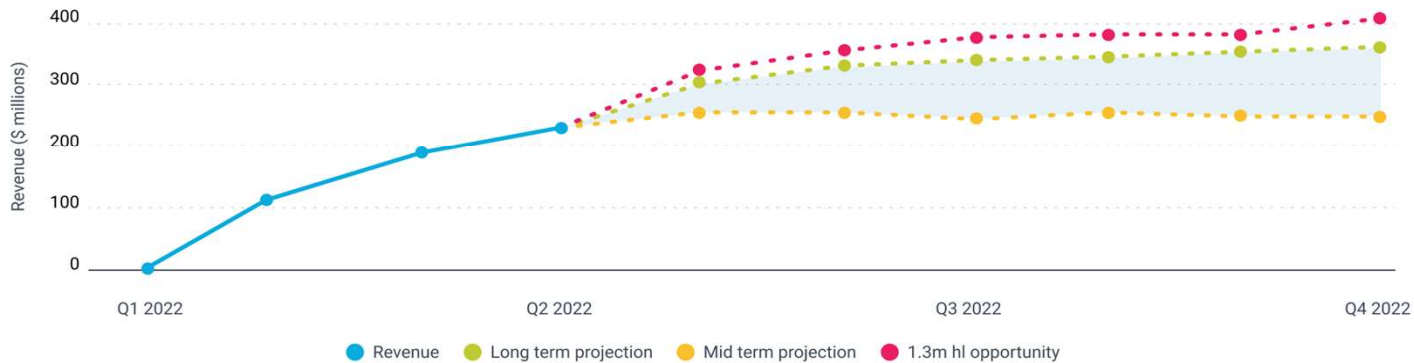
Impact

Response

Scope

Product	Silver
Market	Italy, France
Source	Plant 1, Plant 2, Plant 3

Projected Revenue Funnel



Collaboration



Discuss

Decide

Files

Today

Ellie
1 min ago

@here With high confidence, we can sell from 1 to 1.3m bottles of Heineken Silver in Italy and France.

Saurabh
1 min ago

@Ellie I foresee to cover this demand from Den Bosch and Wylre breweries.

John
1 min ago

@Ellie A finance guy speaking here, please make sure to maximize the margin!

Message





Future revenue Silver launch south Europe

Assumption

New

Open in Planning Space

Type: OPPORTUNITY | Confidence: 70% | Priority: High | Created by: Ellie

No Response Defined There is a missing response.

Opportunity

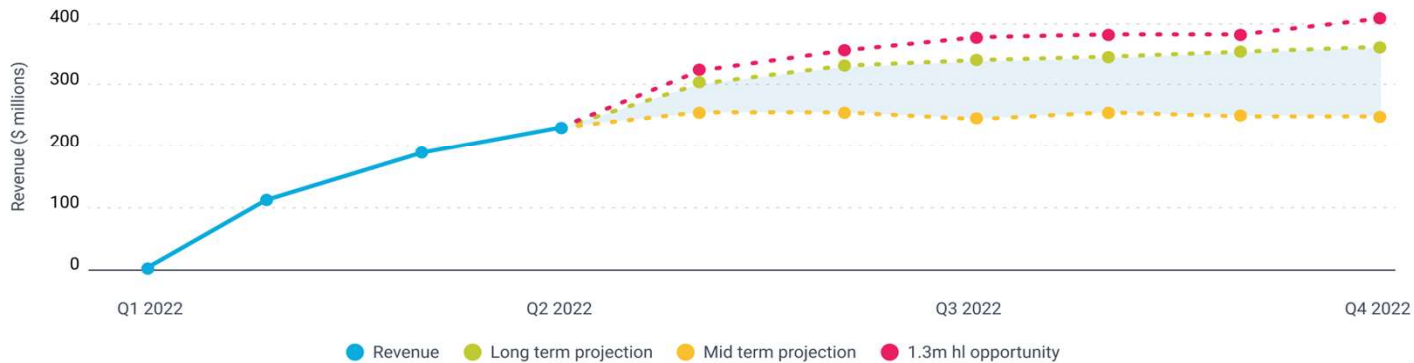
Impact

Response

Scope

- Product: Silver
- Market: Italy, France
- Source: Plant 1, Plant 2, Plant 3

Projected Revenue Funnel



Collaboration



Discuss

Decide

Files

Today

Ellie 1 min ago

@here With high confidence, we can sell from 1 to 1.3m bottles of Heineken Silver in Italy and France.

Message





Future revenue Silver launch south Europe

New

Open in Planning Space



Assumption

Type	Confidence	Priority	Created by
OPPORTUNITY	78%	High	Ellie

No Response Defined There is a missing response.

Opportunity **Impact** Response

Impact: Demand +0.3hls Timerange Q2 - Q4 2022 +

Exceptions

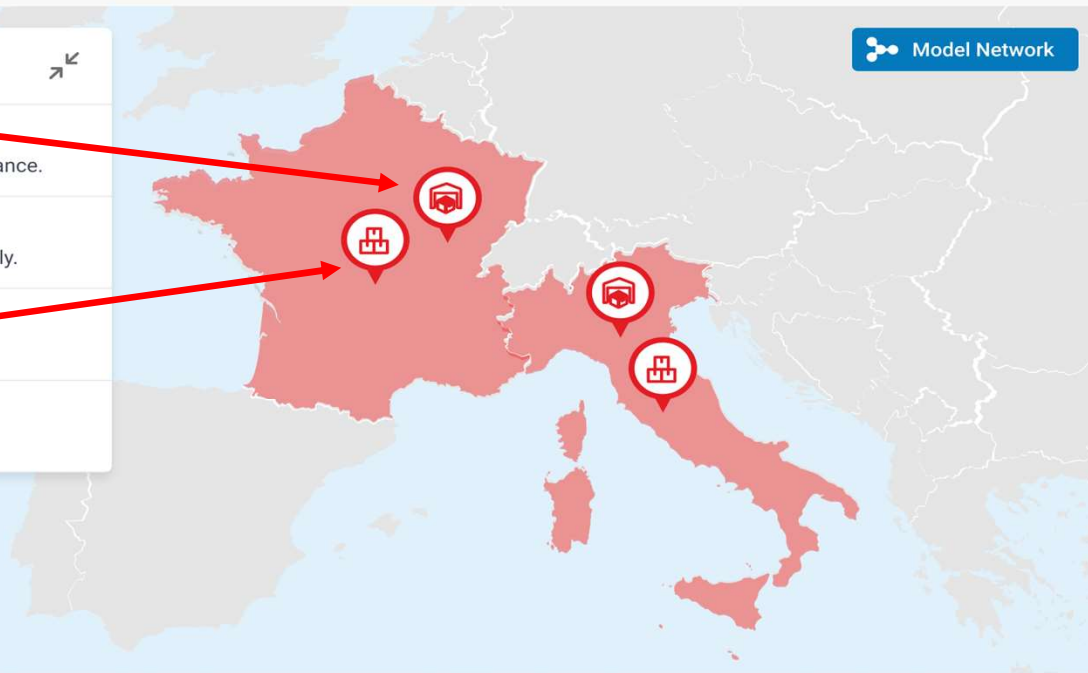


High Capacity in France
Capacity utilization is too high in France.

High Capacity in Italy
Capacity utilization is too high in Italy.

Low Stock in France
Low stock in France.

Low Stock in Italy
Low stock in Italy.



Collaboration



Discuss

Decide

Files

Today

Ellie
1 min ago



@here With high confidence, we can sell from 1 to 1.3m bottles of Heineken Silver in Italy

Message



Imagine If ... scenarios are autonomously created ahead of time, best scenario is recommended



IBP

IBP Process

Future revenue Silver launch south Europe

Assumption

Type: OPPORTUNITY | Confidence: 78% | Priority: High | Created by: Ellie

No Response Defined | There is a missing response.

Optimize for: Margin MAX | Demand Met MAX | Gross Profit Margin MAX

186 Scenarios Considered | Manage Levers

Opportunity	Impact	Response		
Show Lever Details				
	Current Plan	Scenario 1 Recommended	Scenario 2	Scenario 3
Demand	1m hl	1.3m hl ▲ 30%	1.2m hl ▲ 20%	1.1m hl ▲ 10%
Revenue	\$9.0b	\$9.3b ▲ 3.3%	\$9.1b ▲ 1.1%	\$9.3b ▲ 3.3%
Gross Profit Margin	\$498.9m	\$540.8m ▲ 8.4%	\$530.5m ▲ 6.3%	\$547.8m ▲ 9.8%
Cost to Serve	\$5.5b	\$5.6b ▲ 1.8%	\$5.5b ▲ 0.0%	\$5.7b ▲ 3.6%
Service Level	93%	95% ▲ 2.2%	93% ▲ 0.0%	98% ▲ 5.4%
Inventory	\$341m	\$340m ▼ 0.3%	\$341m ▲ 0.3%	\$341m ▲ 0.0%
CO2 Emissions	25.8tCO2	27.3tCO2 ▲ 5.8%	26.9tCO2 ▲ 4.3%	28.1tCO2 ▲ 8.9%

Accept buttons are present under Scenario 1, 2, and 3.

Collaboration

Discuss | Decide | Files

Today

Ellie 1 min ago
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Saurabh 1 min ago
@Ellie I foresee to cover this demand from Den Bosch and Wijre breweries.

John 1 min ago
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Future revenue Silver launch south Europe

New

Open in Planning Space

Assumption

Type	Confidence	Priority	Created by
OPPORTUNITY	78%	High	Ellie

No Response Defined There is a missing response.

Opportunity Impact **Response**

Optimize for: **Margin MAX** **Demand Met MAX** **Gross Profit Margin MAX** +

Collaboration



Discuss

Decide

Files

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1 min ago

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Message



Model Network: Future revenue Silver launch south Europe

Cancel



Save & Simulate

Optimize for: Margin MAX Demand Met MAX Gross Profit Margin MAX +

Source  



Capacity Utilization

92% +5.3%

Make  

Capacity Utilization

91% +5.3%

Distribute  

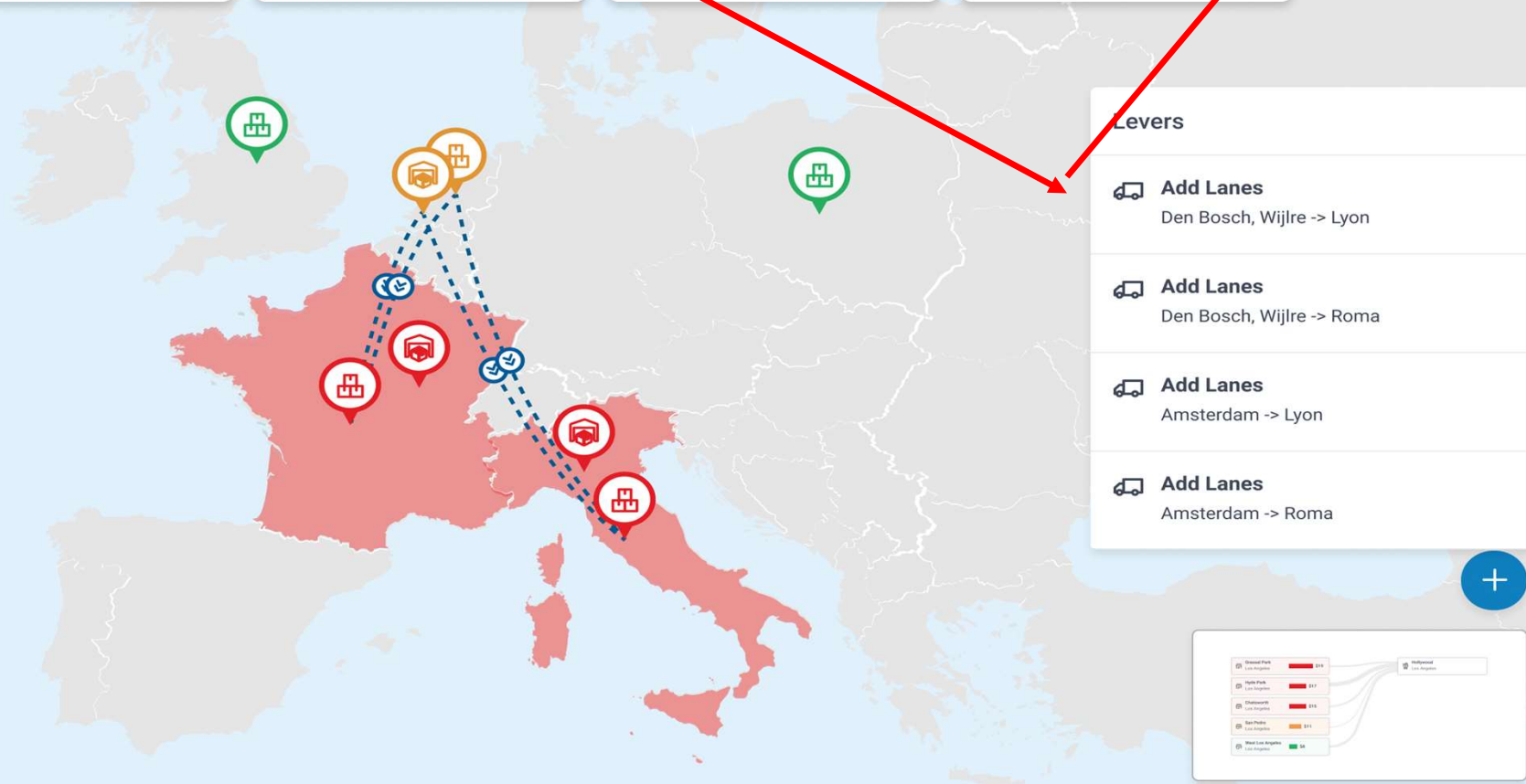
Stock Level

\$21m -7.0%





Sell  

Revenue

\$2.3b +1.4%



Levers

-  **Add Lanes**
Den Bosch, Wijlre -> Lyon
-  **Add Lanes**
Den Bosch, Wijlre -> Roma
-  **Add Lanes**
Amsterdam -> Lyon
-  **Add Lanes**
Amsterdam -> Roma



Future revenue Silver launch south Europe

New

Open in Planning Space

Assumption

Type: OPPORTUNITY
Confidence: 78%
Priority: High
Created by: Ellie

No Response Defined There is a missing response.

Opportunity Impact **Response**

Optimize for: Margin MAX Demand Met MAX Gross Profit Margin MAX

186 Scenarios Considered [Manage Levers](#)

Compare

Show Lever Details	Current Plan	Scenario 1 Recommended	Scenario 2	Scenario 3
Demand	1m hl	1.3m hl ▲ 30%	1.2m hl ▲ 20%	1.1m hl ▲ 10%
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Collaboration



Discuss

Decide

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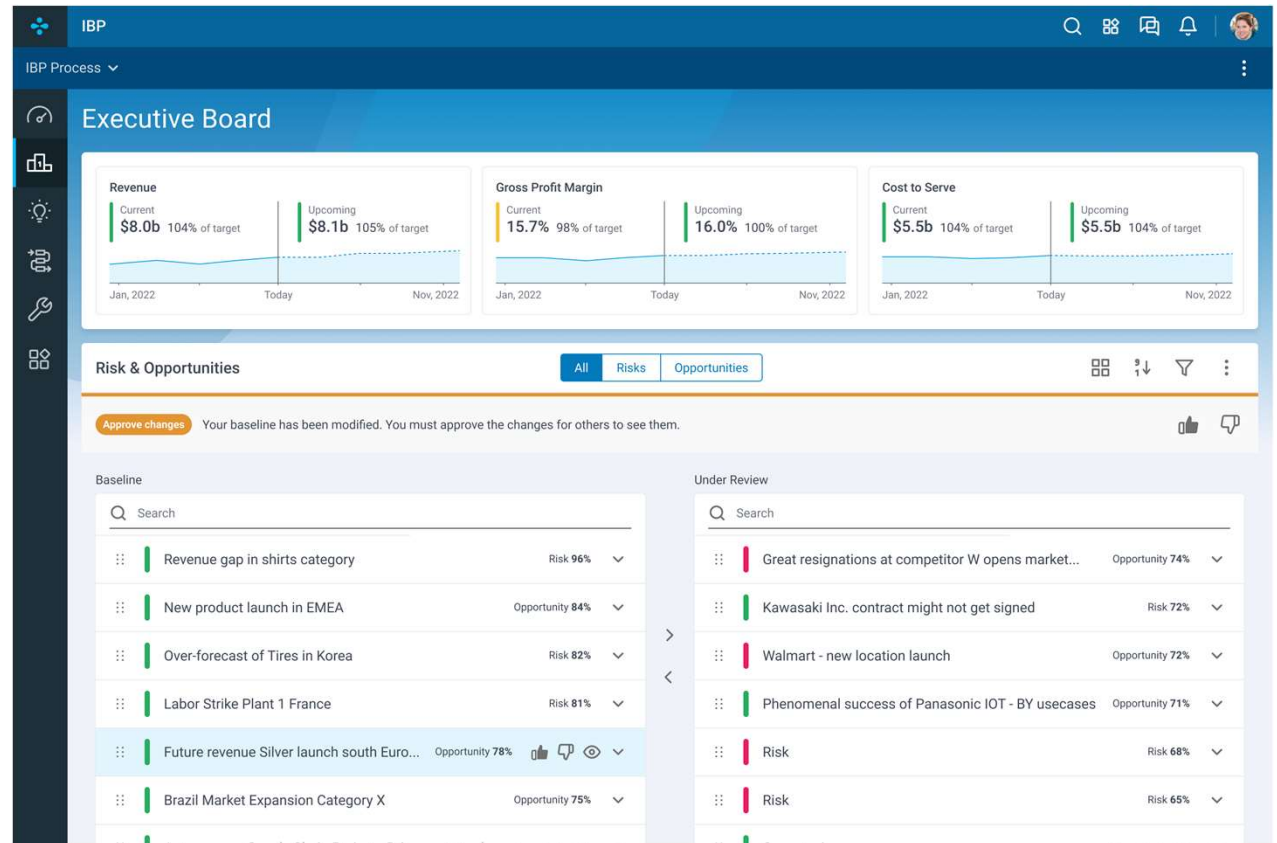
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1 min ago

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Message

Imagine If ... Executives **simulate their P&L** based on risk & opportunities



Executive Board

Revenue



Gross Profit Margin



Cost to Serve



Risk & Opportunities

All Risks Opportunities



Approve changes Your baseline has been modified. You must approve the changes for others to see them.



Baseline

Search

Revenue gap in shirts category	Risk 96%	⋮
New product launch in EMEA	Opportunity 84%	⋮
Over-forecast of Tires in Korea	Risk 82%	⋮
Labor Strike Plant 1 France	Risk 81%	⋮
Future revenue Silver launch south Euro...	Opportunity 78%	👍 👎 👁 ⌵
Brazil Market Expansion Category X	Opportunity 75%	⋮

Under Review

Search

Great resignations at competitor W opens market...	Opportunity 74%	⋮
Kawasaki Inc. contract might not get signed	Risk 72%	⋮
Walmart - new location launch	Opportunity 72%	⋮
Phenomenal success of Panasonic IOT - BY usecases	Opportunity 71%	⋮
Risk	Risk 68%	⋮
Risk	Risk 65%	⋮

Key Changes for ABP (Autonomous Business Planning)



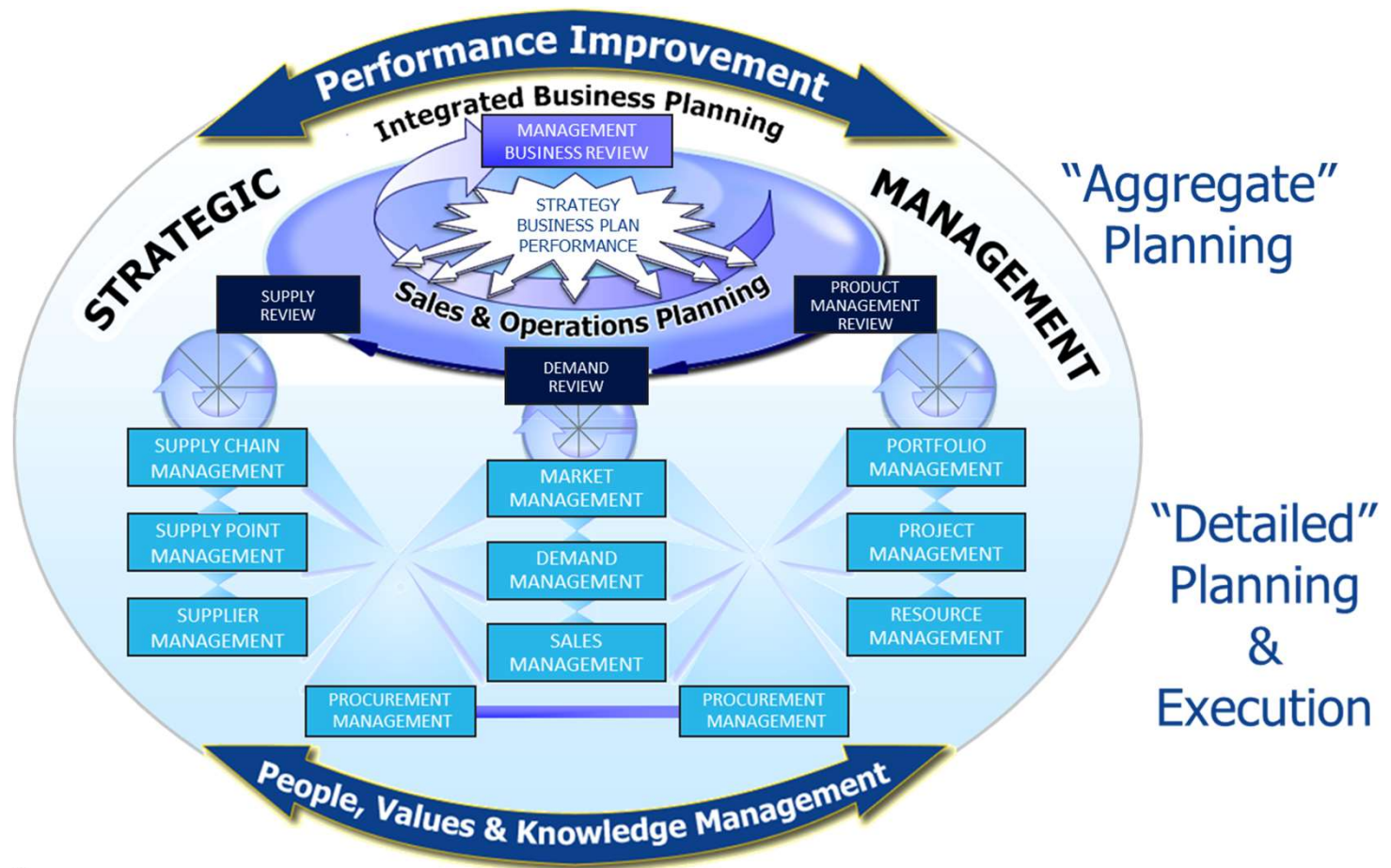
Let AI/ML make & recommend scenarios, increase efficiency & resilience



Onboard Executives into decisions
> From siloed organization/cadence To instant decisions



Your S&OP / IBP Processes



BY ABP will reinforce your S&OP/IBP processes!

> Autonomous Business Planning

BY ABP : Autonomous Business Planning

S&OP / IBP Processes

