

# Extended Planning and Analysis with SAP Analytics Cloud




**EY**

Building a better  
working world



**SAP**  
Global  
Partner



# Traditional financial planning and analytics versus extended planning and analysis with SAP Analytics Cloud

It has been recognized that traditional financial planning and analytics (FP&A) is not sufficient to transform budgeting planning processes into a collaborative enterprise process that drives improved operational efficiency and financial outcomes.

As we have seen recent events unfold around the globe, organizations have dealt with supply chains being disrupted, changes in customer demand, changes in transportation costs, raw material cost impacts and more. Organizations have limited capabilities to respond to these disruptions and model the impacts to their business. This has created a heightened awareness and a demand for more advanced and integrated FP&A, which has evolved into its own business process called "extended planning and analysis" (xP&A), a term defined by Gartner. Extended planning and analysis xP&A has become so recognized that Gartner is planning to publish an analysis report dedicated to only xP&A solutions. This evolution to xP&A is so prevalent that Gartner predicts the following:

- ▶ By 2024, 70% of all new financial planning and analysis projects will become Extended Planning and Analysis (xP&A) projects by extending their scope beyond the finance domain into other areas of enterprise planning and analysis.<sup>1</sup>

Let's take a closer look at the following key topics:

- ▶ The challenges with traditional FP&A
- ▶ Organizational requirements to implement xP&A
- ▶ How to enable xP&A with SAP Analytics Cloud

---

<sup>1</sup> Gartner, Inc., 2020 Strategic Roadmap for Cloud Financial Planning and Analysis Solutions, Robert Anderson and John Van Decker, February 21, 2020.



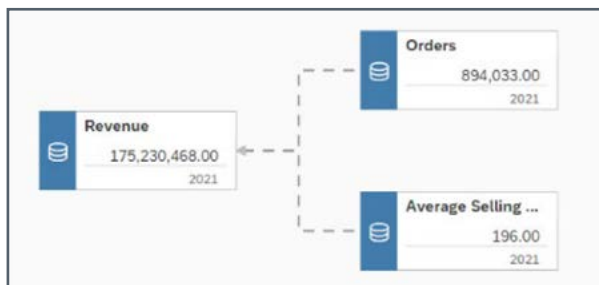
## Challenges with traditional FP&A

Traditional financial planning is typically focused solely on a roll-up or an aggregation of the financials and typically produces a simplistic actual versus plan analysis in a financial statement format. While this output may be a necessity, these types of planning processes do not add much value to the organization due to the following challenges:

- ▶ Lengthy cycle times
- ▶ Limited relevance to operations
- ▶ Lack of transparency or integration with key business drivers, key performance indicators (KPIs) and analytics
- ▶ Inability to perform a root-cause analysis
- ▶ Limited scenario or modeling capabilities

These planning processes are typically a derivation of a financial statement line item based on an “aggregation” of operational general ledger (GL) accounts that are derived from islands of spreadsheets with excessive detail and static data.

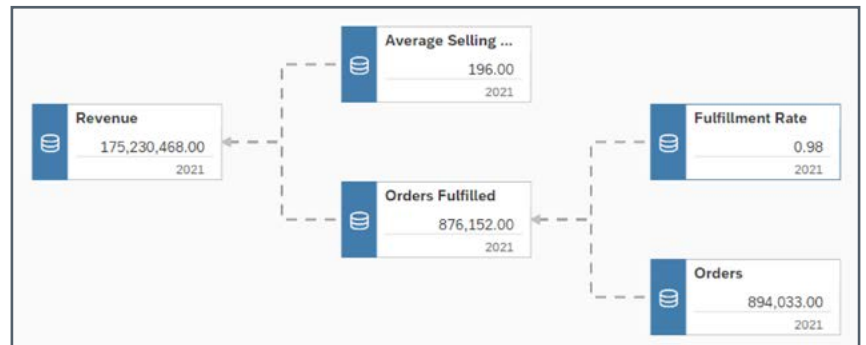
The result is a financial plan with no relevance to operations and no accountability or clear line of sight into how operations impact financial outcomes. One example is the case of a manufacturing company working on its revenue forecast. The revenue forecast is based solely on orders and average selling price and does not take operational aspects into account.



Source, SAP Analytics Cloud

Through collaboration with operations teams, including manufacturing and warehouse management, we identified other variables or “drivers” to expand our approach to the revenue forecast (fulfillment rates, production capacity, planned shutdowns, etc.).

By expanding our driver tree to include just one additional component (see figure below), the forecast becomes more valuable and provides visibility on the impact of order fulfillment rates on revenue.



Source, SAP Analytics Cloud

Extending the planning processes to include operational inputs improves many aspects of the planning process, including:

- ▶ Transparency to key business drivers (e.g., fulfillment rate)
- ▶ Root-cause analysis (e.g., average selling price, orders or fulfillment rate)
- ▶ Visibility of operational impacts on financial impacts
- ▶ Embedding analytics and KPIs into the planning process, either as output or a driver



# Organizational requirements for xP&A

Implementing these types of planning processes can be challenges; however, addressing the following four organizational requirements will minimize potential challenges:

- ▶ Adopt a set of guiding principles for xP&A
- ▶ Develop and implement a new operating model enabling success and adoption
- ▶ Design and establish an end-to-end planning process with a common approach
- ▶ Establish a data model that recognizes the intersection of financial reporting, planning/management reporting and analytics

## Guiding principles for planning and analysis

Guiding principles provide the foundation or “guardrails” to direct and manage decision-making within project teams. These principles typically apply to the program and the project team executing the

implementation. Establishing these guiding principles is also one of the first steps to gain alignment on the future of planning. In the context of planning, eight specific areas should be addressed:

### 1. Responsive

Shorter and more frequent planning cycles to react against business dynamics, targeting a monthly frequency

### 2. Rolling +18 months

Expanded time horizon (covering the next FY at least starting from the midyear forecast); budget can become a by-product

### 3. Integrated with business plans

Strong integration with Sales, Marketing and Operations planning, at least for the short-term period (+3/6 months)

### 4. Predictive and simulation-ready

Building driver-base, predictive models by harnessing the richness of data; push for simulation capabilities to support effective decisions

### 5. User-centric

Moving the current manual planning process to an improved, less manual planning experience

### 6. Responsive and accurate together

Simplification is key to achieving more responsive planning

### 7. Central vs. local views

Ensure the right balance and flexibility between corporate and local needs (timing and deadlines, views, models, granularity, etc.)

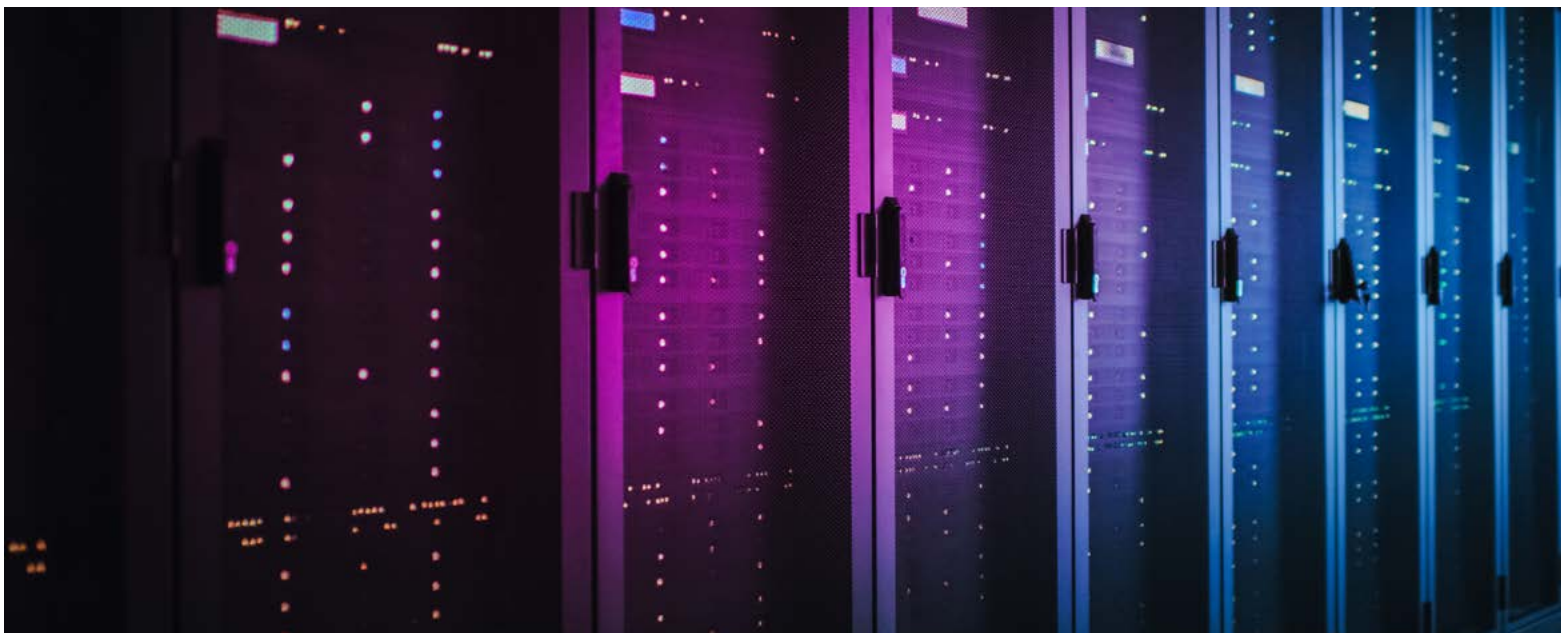
### 8. Standard and adaptable

Process standardization at different levels of complexity and localization, built around a robust and common backbone



Utilizing guiding principles provides not only clarity and direction, but also a foundation for having tangible business requirements:

Guiding principle	Requirement(s)
Responsive	<ul style="list-style-type: none"> <li>▶ Be able to update the plan without performing a complete bottom-up planning cycle</li> <li>▶ Base planning on internal or external business events versus a “calendarized” schedule</li> </ul>
Rolling 18-month forecast	<ul style="list-style-type: none"> <li>▶ Provide visibility beyond the current year</li> <li>▶ Remove duplicative planning processes (e.g., annual plan)</li> </ul>
Integration with business plans	<ul style="list-style-type: none"> <li>▶ Include operational drivers that drive business outcomes; financial and nonfinancial (e.g., efficiency, order fulfillment)</li> </ul>
Predictive and simulation-ready	<ul style="list-style-type: none"> <li>▶ Utilize predictive methods with historical data patterns, including internal and external economic indicators to support planning</li> <li>▶ Enable a real-time, end-user scenario analysis utilizing driver-based modeling</li> </ul>
User-centric	<ul style="list-style-type: none"> <li>▶ Develop planning models that require very limited manual input</li> </ul>
Visibility	<ul style="list-style-type: none"> <li>▶ Provide a line of sight between operational inputs and financial outcomes</li> </ul>
Central versus local	<ul style="list-style-type: none"> <li>▶ Identify commonality in local processes to define a centralized approach</li> </ul>
Standard and adaptable	<ul style="list-style-type: none"> <li>▶ Support agile planning models that can be easily changed as external or internal events impact financial outcomes</li> </ul>

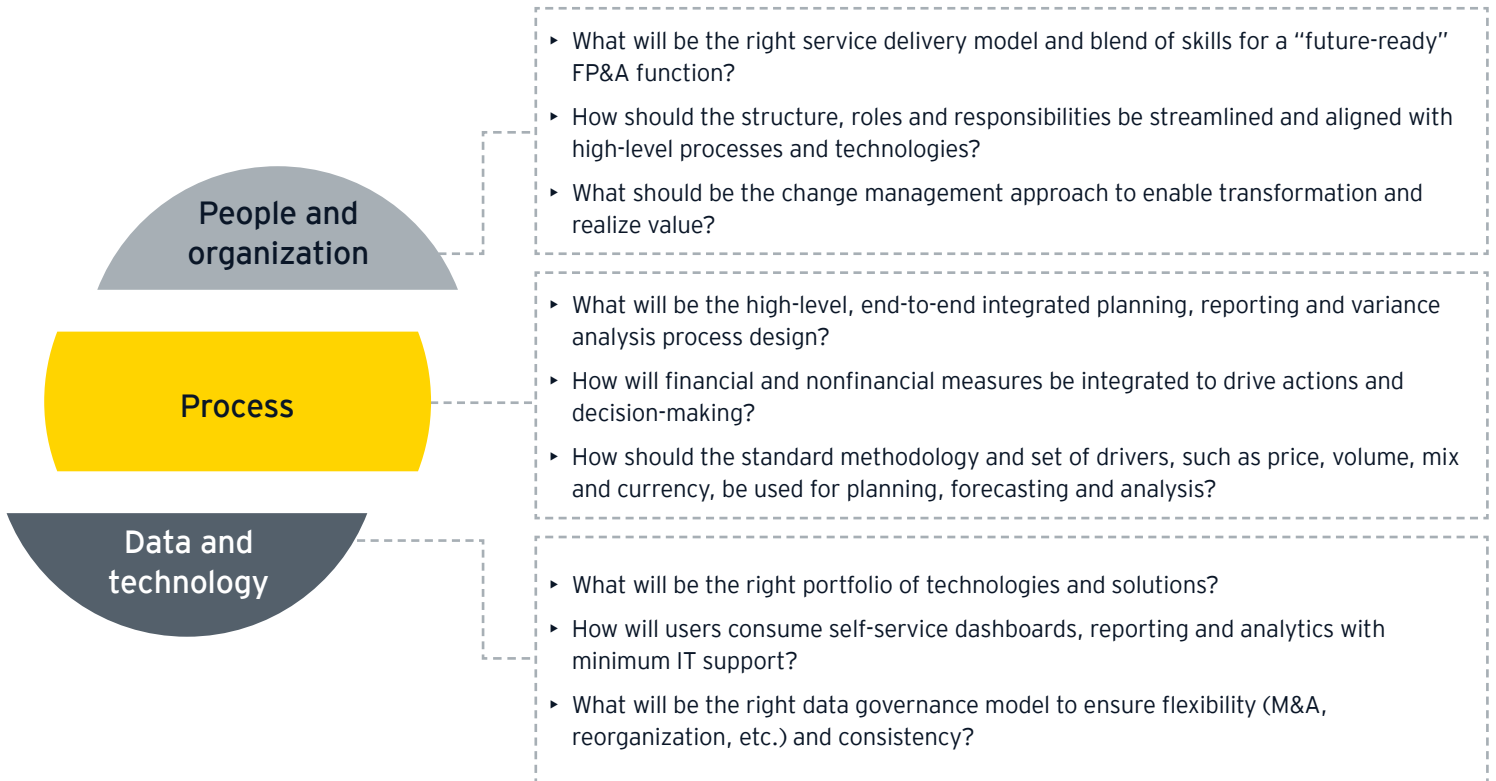




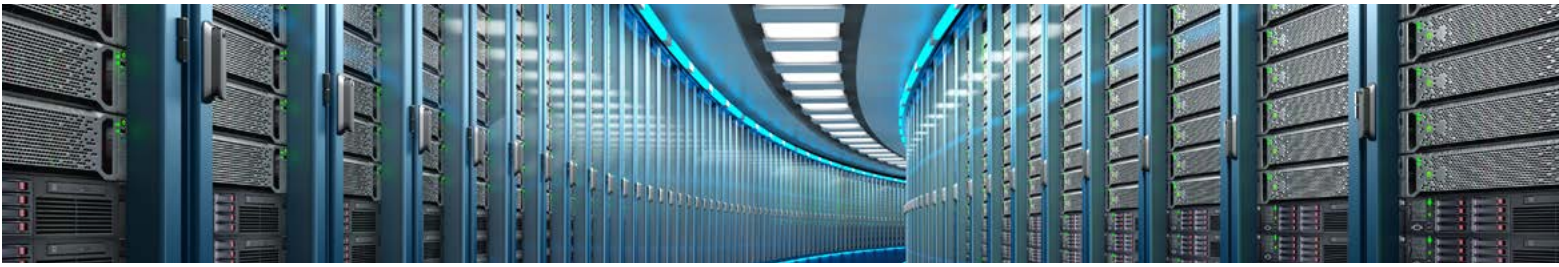
# Planning and analysis operating model

Once guiding principles are defined, an operating model should be established to support these principles. The operating model supports not only guiding principles, but also adoption (people and organization), the definition and evolution of the new planning processes, and management of the data and

technology components that enable xP&A. Without addressing these components, organizations will typically revert to their traditional processes or have limited transformative value.



**What is the right agile approach and implementation plan with phased deployments to mitigate the risks, drive the adoption and deliver incremental value along the way?**

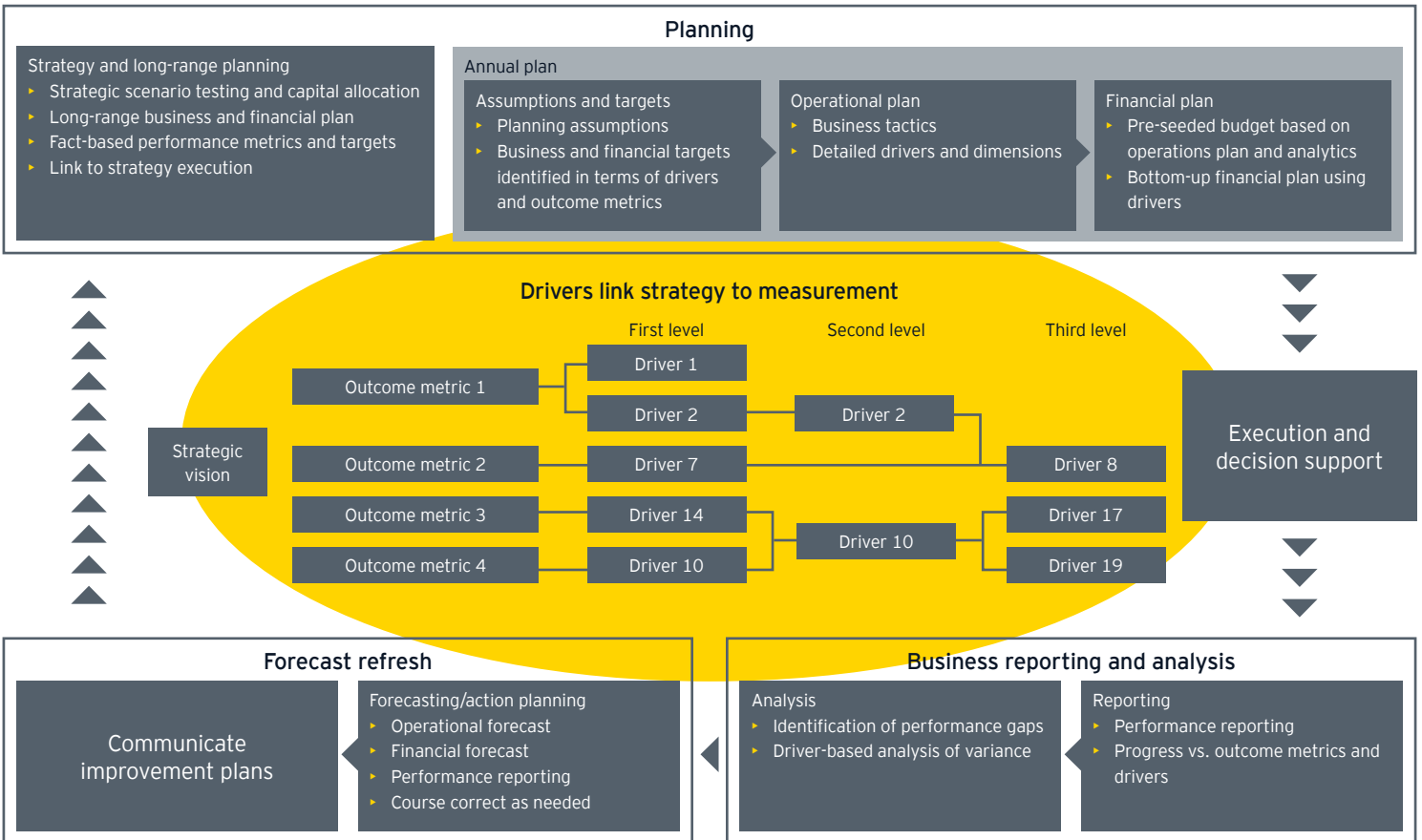


# End-to-end planning process and methodology

A third area to address is the definition of the end-to-end planning process and what approach or methodology will be used across the planning processes. One way to look at the end-to-end process is to view it as a perpetual process that consists of the following:

- ▶ Strategic or long-term plan
- ▶ Forecasted refresh and annual plan (a by-product of the rolling forecast), including operations and finance
- ▶ Business reporting and performance management
- ▶ Forecasted updates based on business conditions

Once the process has been defined, the approach or methodology for each of the processes and, in certain cases, subprocesses needs to be determined. The approach is one of the most important aspects because this is the point where the changes are "felt" by the employees, a sense of discomfort sets in as planners realize that their spreadsheets are going to disappear, and planning assumptions and inputs are going to have heightened visibility.





# Data model

In traditional planning, data requirements often have a focus on financial data for management reporting and limited operational data.

However, in extended planning, the planning processes include operational input, and, therefore, the data requirements are markedly different. When defining extended planning models, they should not only include financial data, but also operational data with key drivers and linkage to externally reported financials.

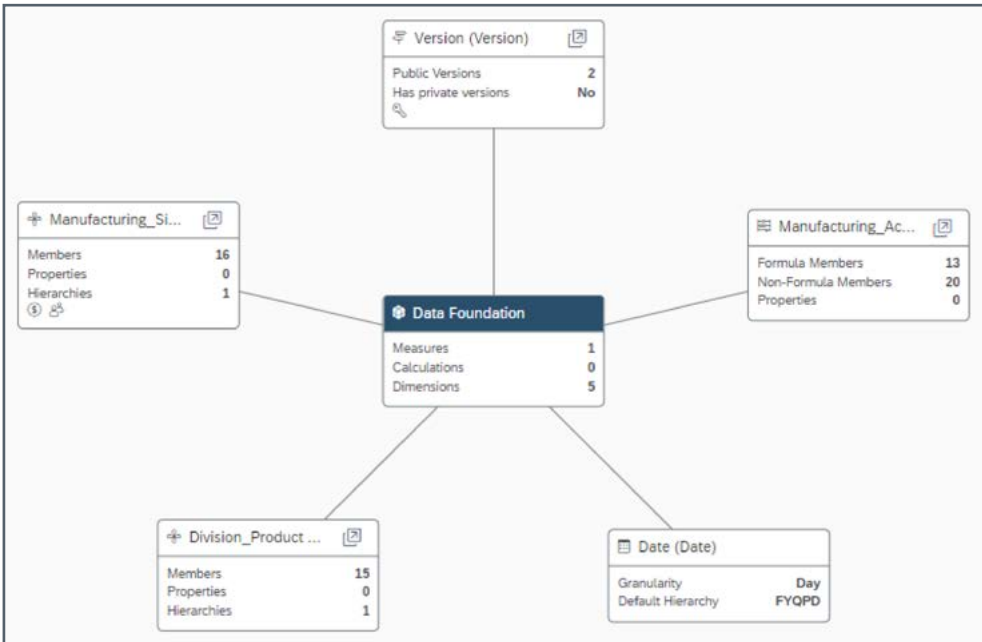


Defining the data model can often become a cumbersome effort; however, to simplify the approach, the following steps can be taken:

- ▶ Identify the ultimate output (e.g., revenue, cogs, margin)
- ▶ Decompose the ultimate output in terms of the financial subcomponents
- ▶ Identify the nonfinancial variables that impact the subcomponents

Reflecting on the example below, we can quickly ascertain what we need to derive revenue.

Orders, fulfillment rate and average selling price by financial period, product (division) and manufacturing site result in the following data model (simplified view):



Source, SAP Analytics Cloud





# Enablement with SAP Analytics Cloud

Once the processes, operating model and data model have been defined, the next step is how to use it. SAP Analytics Cloud provides a unique solution, not only because of its integration with SAP and non-SAP data sources (financial and operational) systems, but also because it offers a unique set of capabilities in a single technology platform, including:

- ▶ Visualizations and dashboards, including Analytics
- ▶ Planning
- ▶ Predictive and machine learning capabilities
- ▶ Custom analytical applications

By utilizing SAP Analytics Cloud, organizations can extend their planning and **identify** business issues, **determine** the root cause and **model** the impact of changes to key financial and operational drivers.

Here is an example of SAP Analytics Cloud being used to identify an issue, determine the cause and model changing a key driver.

## Identify

The SAP Analytics Cloud visualization below contains a mix of financial and operational data presented in three different views: a “Manufacturing Margin Statement,” KPIs and interactive graphs.

What quickly becomes apparent is that, while most of the KPIs are performing positively vs. plan, revenue is below plan. By looking further in the upper right quadrant of the dashboard, these challenges appear to be specifically related to International.

**Date Range Filter**

2020 2021 2022

**Division**

- All
- Electronics and Imaging
  - Printing
  - Display
  - Polymers
- Safety and Construction
  - Building Materials
  - Countertops

**Manufacturing Location**

- All
- International
  - Europe
    - Istanbul, Turkey
  - Asia
    - Nagoyo, Japan
    - Shanghai, China

**Manufacturing Margin**

	Actual	Planning
Price	324	310
Orders Shipped	165,000	198,710
<b>Revenue</b>	<b>53,460,000</b>	<b>61,600,100</b>
Shifts Day	4	3
Employees per Shift	4	3
Shift Rate	1,250	1,000
<b>Direct Labor Cost</b>	<b>20,000</b>	<b>9,000</b>
Material Cost	28	102
Transportation Cost	0.01	0.01
Insurance Cost	0.01	0.01
<b>Material Cost Per Unit</b>	<b>28</b>	<b>104</b>
Uptime (%)	0.82	0.87
Production Capacity	187,497	187,506
Production Output	153,748	163,130
<b>Total Material Cost</b>	<b>4,304,944</b>	<b>16,965,520</b>
<b>Direct Cost</b>	<b>4,364,703</b>	<b>17,025,440</b>

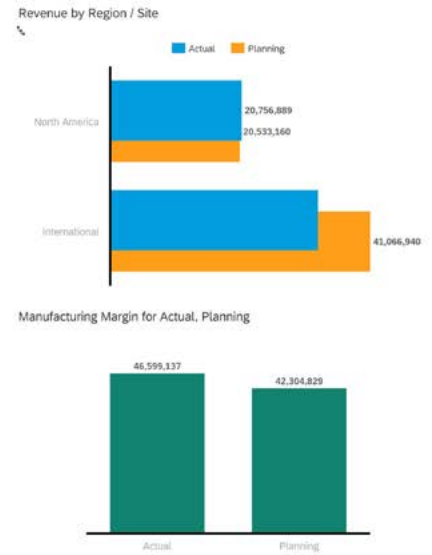
**Price for Actual**  
| 1 Variance  
**324 (+14)**  
Price (Actual - Planning )

**Revenue for Actual**  
| 1 Variance  
**53,460,000 (-8,140,100)**  
Revenue (Actual - Planning )

**Material Cost Per Unit for Actual**  
| 1 Variance  
**28 (-76)**  
Material Cost Per Unit (Actual - Planning )

**Direct Cost for Actual**  
| 1 Variance  
**4,364,703 (-12,660,737)**  
Direct Cost (Actual - Planning )

**Manufacturing Margin for Actual**  
| 1 Variance  
**46,599,137 (+4,294,307)**  
Manufacturing Margin (Actual - Planning )



Source, SAP Analytics Cloud



## Determine

The next step in the analysis is to determine what the real issue is: “Why is international revenue performing below plan?”

By linking operational and financial data (xP&A), the analysis reveals that international order fulfillment rates are lower versus North America.



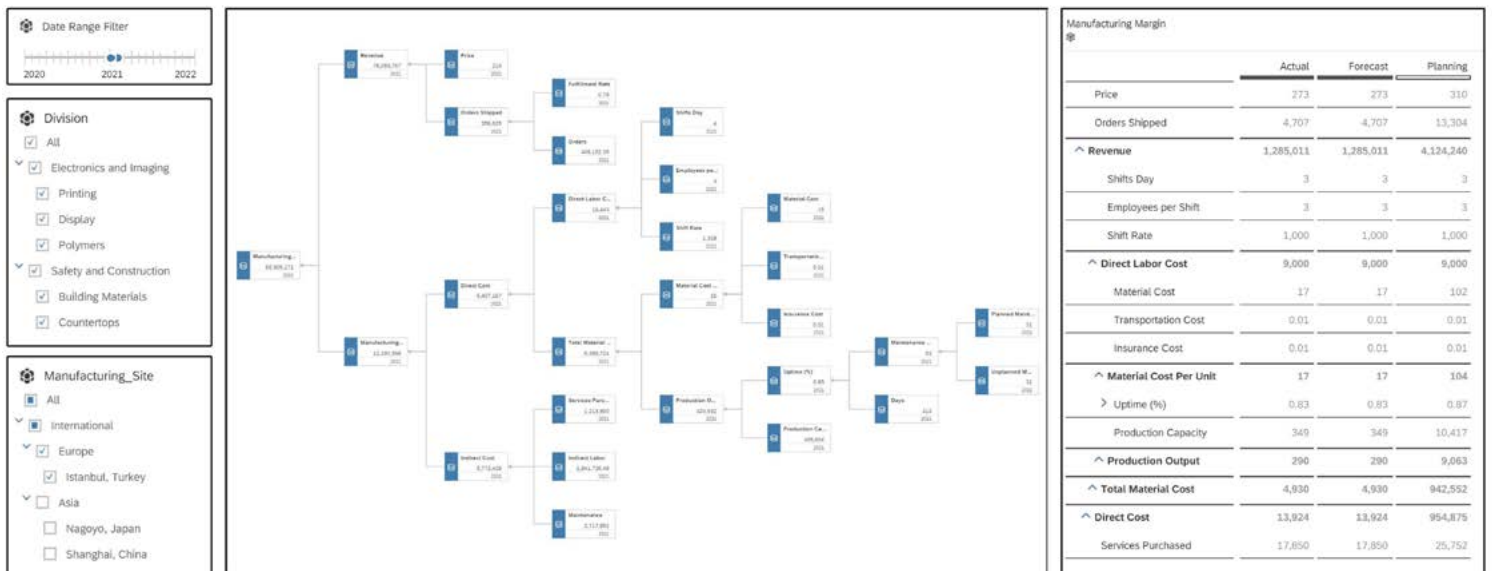
Source, SAP Analytics Cloud

Drilling down on our fulfillment rates quickly illustrates that there is an an order fulfillment issue in the plants in Shanghai and Nanjing.

## Model

Once we understand the issue, we can start modeling potential solutions. Driver trees enable organizations to adjust key plan inputs (drivers) and determine an appropriate course of action(s).

A new scenario or category (e.g., forecast) is created, and then changes to the driver tree are modeled in real time.



Source, SAP Analytics Cloud

## Reframing your future

Recent global events and their influence on sector and macroeconomic indicators have increased the importance of xP&A. These events disrupt customer demand, supply chains, logistics, etc., temporarily and, in some cases, permanently. xP&A is rapidly becoming the new norm and is expected to be larger than the current FP&A market.

Successfully implementing xP&A requires an appreciation of challenges with traditional FP&A; the organizational requirements to adopt xP&A; and utilization of a specific technology, such as SAP Analytics Cloud to enable it as a core business capability.



# Contacts:



**Aylin Korkmaz**  
*Partner/Principal,*  
*Technology Consulting*  
Ernst & Young LLP  
aylin.korkmaz@ey.com



**Sanjay K. Upmanyu**  
*Managing Director,*  
*Technology Consulting*  
Ernst & Young LLP  
sanjay.upmanyu@ey.com

## EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via [ey.com/privacy](https://ey.com/privacy). EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit [ey.com](https://ey.com).

© 2021 EYGM Limited.  
All Rights Reserved.

EYG no. 004527-21Gbl  
BSC no. 2105-3776355  
ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

[ey.com](https://ey.com)