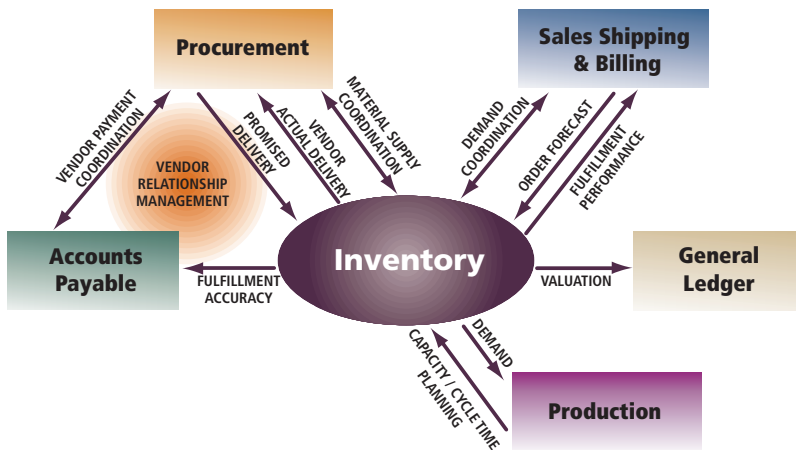




# INVENTORY ANALYSIS WITH COGNOS® PERFORMANCE APPLICATIONS

FIND THE PERFECT LEVEL

Inventory organizations must balance meeting customer demand with maintaining an optimum stock level and contributing to internal cash flow. It's crucial that they understand internal inventory activities and how they affect other functional areas to keep customers happy and maximize inventory efficiencies.



*The inventory function operates in close conjunction with many other core functions in an organization to ensure effective vendor relationships, material demand, and order fulfillment.*

Cognos Performance Applications quickly turn your corporate data into an information asset to answer your key business questions. By packaging best-practices business requirements, Cognos Performance Applications create a rich, business analysis environment for all levels in your organization.

## CONFIDENT INVENTORY MANAGEMENT

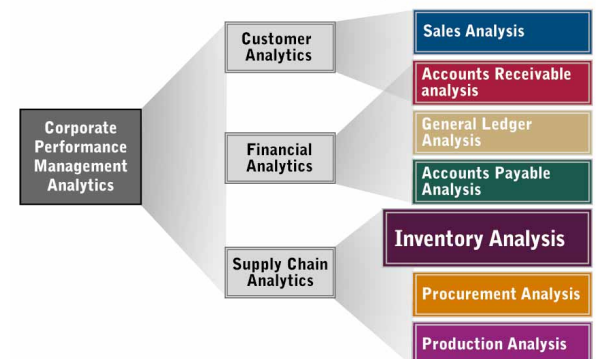
Cognos Inventory Analysis gives you actionable information about your inventory investment. You can understand consumption, turns, returns, and material movements, in units or cash, in averages or spreads. You can analyze any aspect of your inventory by vendor, material, material group, warehouse, region, status, or any other perspective you choose. Find out how any measurement compares to last year, how it's trending over time, and so on.

The six key areas of analysis answer 450-plus critical business questions, using more than 70 key performance indicators (KPIs) and over 40 reports. Real-time interaction with the reports and the 16 dimensions lets you manipulate the information and drive deeper analysis. You gain an in-depth understanding of your past and current stock level and movement that lets you:

- Ensure stock is meeting the demands of internal (MRO and manufacturing) and external customers.
- Manage the cost of owning inventory.
- Review stock levels.
- Identify opportunities to optimize inventory levels.
- Improve operational performance.

## STRENGTHEN ENTERPRISE MANAGEMENT

Using Cognos Inventory Analysis, you can analyze operational effectiveness to ensure that the inventory function is contributing to overall corporate performance and stakeholder value. Evaluate current processes and identify trends and



*Inventory Analysis is part of Cognos Performance Applications CPM Foundation—which tears down information silos and lets you see across all core business functions.*



THE NEXT LEVEL OF PERFORMANCE™

# Answers to the Im

This is just a sample of the many inventory related questions yo

## Inventory

### STOCK OVERVIEW AND VALUATION ANALYSIS

*What stock are we carrying, where is it, and what is it worth? Understand your current inventory investment and how it is distributed.*

#### Sample Questions

- What has been our average corporate investment in stock this period, last period, and over the last year?
- How many units of inventory are we holding by specific material groups? which warehouses, plants, locations?
- How many days of inventory do we have in each warehouse, and has the amount been meeting demand in each region?

### MATERIAL MOVEMENT ACTIVITY ANALYSIS

*Analyze stock movement in and out of inventory and within the organization, and understand how goods receipts, issues, and transfers relate to stock levels, shortages, and processes.*

#### Sample Questions

- How many movements have been processed this period compared to last? how do they break out into goods receipts and issues?
- What is the number and value of goods receipt of inventory processed from a specific vendor to a specific warehouse?
- What proportion of inventory was received into unrestricted inventory, quality control, and other restricted statuses over the last quarter?
- What is the average number of goods issues processed this period across organization and in specific warehouses?

### DEMAND ANALYSIS

*Determine whether stock levels and fluctuations are letting your company meet customer demand.*

#### Sample Questions

- How many goods issues were processed this period versus last to manufacturing, how many to maintenance, repair, and operations, and how many fulfill sales orders?
- What specific material segments were issued and how did this compare to stock levels across the company?
- What were the maximum and minimum levels of inventory reached across warehouses and are these fluctuations within predefined limits?

### MATERIAL RESERVATIONS ANALYSIS

*Avoid unnecessary excess stock and shape inventory policy on reserved stock. Understand how reservations for internal or external customers impact stock levels and ability to meet demand.*

#### Sample Questions

- How effectively has confirmed stock met the requirements for a specific material this period as compared to last?
- How do your warehouses rank in terms of meeting requests for inventory? full, and are some warehouses consistently underperforming?
- What percentage of confirmed reserved stock was not withdrawn from inventory, resulting in unnecessary excess stock?

### PHYSICAL INVENTORY ANALYSIS

*Find out whether what you have in inventory is what you think you have.*

#### Sample Questions

- How accurate have our physical counts in units been across the organization this period and is our percent accuracy improving?
- How large have our shortages or overages been on average and where have they occurred?

### INVENTORY FORECAST ANALYSIS

*Improve your ability to forecast stock levels through an understanding of the effectiveness of your past forecasting.*

#### Sample Questions

- How close was this period's inventory forecast to actual results?
- How accurate have forecasts been for "A" class materials in a specific warehouse?

Cognos Performance Applications enable a thorough analysis of the inventory function well beyond the questions shown here. Multidimensional analysis lets you expand on any single question in any direction you choose, deepening the knowledge you gain from your ERP data.

# Important Questions

you can answer in six vital areas using Cognos Inventory Analysis.

## Inventory Analysis

- How do materials compare within an ABC analysis? Where are my “A” class materials being handled and how often are they turning?
- How much of my inventory is available for distribution, how much is in consignment, and how much is restricted stock?
- What is the velocity of our inventory—are certain materials fast-moving, slow-moving, or dead?
- What percentage of restricted stock was drawn from inventory over the last year?

### Sample KPIs

- Average stock level and value
- Minimum and maximum stock levels
- Inventory turns
- Stock level coverage
- Inventory stock outs
- Zero stock days
- Overstock quantity
- Days of inventory
- Required quantity
- Moving average levels/usage

- What materials were issued, how many issues were related to each material, and from which shipping points?
- What types of issues have been processed, and what proportion of materials have been issues to order fulfillment, consignment, and scrap?
- How many receipts have been processed by employees this period?

### Sample KPIs

- Movement quantities
- Movement values

- Did any warehouses experience zero stock levels this period and, if so, how often and how many days for specific materials?
- How many “stock outs” occurred across the organization, and did specific warehouses and materials have more stock outs than others?
- For materials experiencing the most stock outs, what were the related zero stock counts and zero stock days?

### Sample KPIs

- Transaction counts by customer
- Average transaction values by customer
- Number of units issued by customer
- Overusage quantity
- Moving average usage
- Required usage

- Are excess inventory reservations prevalent in specific warehouses or material segments?
- How much lead time is there between the request for stock and the required date for the stock and how has this changed over time?

### Sample KPIs

- Reserved quantities and values
- Withdrawn quantities and values
- Confirmed quantities and values

- Are there any warehouses or storage locations that are performing outside corporate standards for physical count accuracy?
- Are shortages consistently occurring within specific materials groups or materials, or are these shortages anomalies?

### Sample KPIs

- Book and physical stock level count
- Book and physical stock group currency value
- Actual stock level and group currency value
- Relative stock accuracy percentage

- How have forecasts for specific items changed over time and do they compare to the demand for those materials?

### Sample KPIs

- Forecast period value
- Corrected forecast values
- Seasonal forecast index values
- Forecast usage quantity

(... continued from page 1)

opportunities for improvements. Analyze vendor and product performance and use the profiles to foster strategic supplier relationships.

Of course, no function operates in isolation. An enterprise-wide implementation of Cognos Performance Applications lets you see causes and effects across functions. You can investigate billing accuracy between inventory and accounts payable, perform vendor analysis in conjunction with procurement, and carry out demand planning and ensure order fulfillment with sales shipping. This strategic enterprise-wide analysis lets your organization manage with confidence.

### INVENTORY SCENARIO: STOCK REDUCTION

Suppose that part of your corporate strategic plan is to reduce costs without impacting customer satisfaction. In the inventory function, cost reduction could result from reducing stock days of high-impact or high-cost items without increasing stock outs. Cognos Inventory Analysis helps you determine how to do this.

To find out which group of inventory items has the greatest impact on costs, you view all of your 'A' class inventory items and rank them by average stock value for the last year. Choosing a group of the highest stock value materials, you rank them by average overstock quantity amount for the last 12 months. Of these overstocked, high-impact materials, the ones with the largest average overstock value and the lowest inventory turns

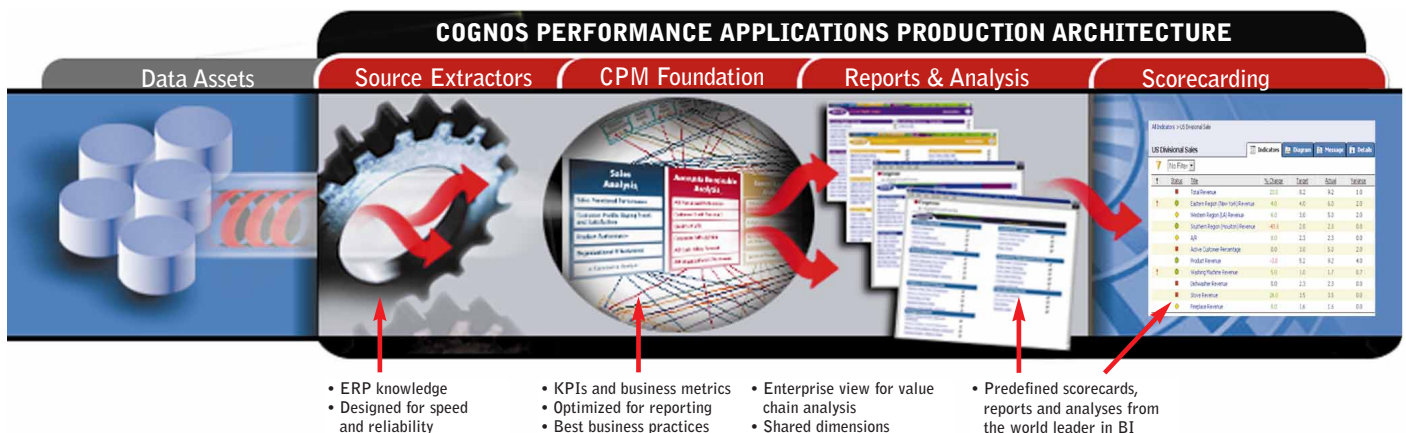
are potential candidates for optimization.

But first it's important to determine why these materials are overstocked—either you are incorrectly forecasting usage or actual usage is dropping. Increasing coverage days and falling usage rates indicate that, in fact, usage quantity is falling.

Cognos Performance Applications have shown that reducing the coverage days for overstocked, high-value products whose usage quantity is falling will significantly lower costs without increasing stock outs or impacting customer satisfaction.

### FULL SOLUTION—ONE VENDOR

To build Inventory Analysis, Cognos has drawn on years of expertise as the market-leading provider of fully integrated business intelligence solutions. Cognos is the only vendor in the market to offer an end-to-end solution that gives everyone from executives to production managers fast, insightful, appropriate answers to critical business questions. The global coverage and world-class professional services, support, and training offered through Cognos give you a single point of contact focused on your success. When you combine these advantages with the rich business content of Cognos Performance Applications, you get a powerful business solution designed to give you that competitive edge.



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