ERP and Your Business

ERP is the acronym for Enterprise Resource Planning.

ERP is a **database software package** that supports all of a business's processes and operations including manufacturing, marketing, financial, human resources, and so on.

Is your ERP providing you with the right answers?

Do You Know:

- If your Sales are in line with your forecasts and budgets?

- If your sales team are giving too much discount?

- Which of your products are giving you the best returns?

- What are your trends with regards to revenue, cost and volume?

Do You Know:

- Which of your customers provide the most income?
- Which of your customers pay on time?
- Which of your customers provide the best margins?
- Which of your products provide the best income and margins?

Do You Know:

- If you are carrying too much inventory to meet demand?
- Are you delivering on time?
- Can your existing production capacity meet demand?
- Are you paying too much for some of your parts?

Sophia can tell you with the click of a button and show you where to make important changes

Meet Sophia

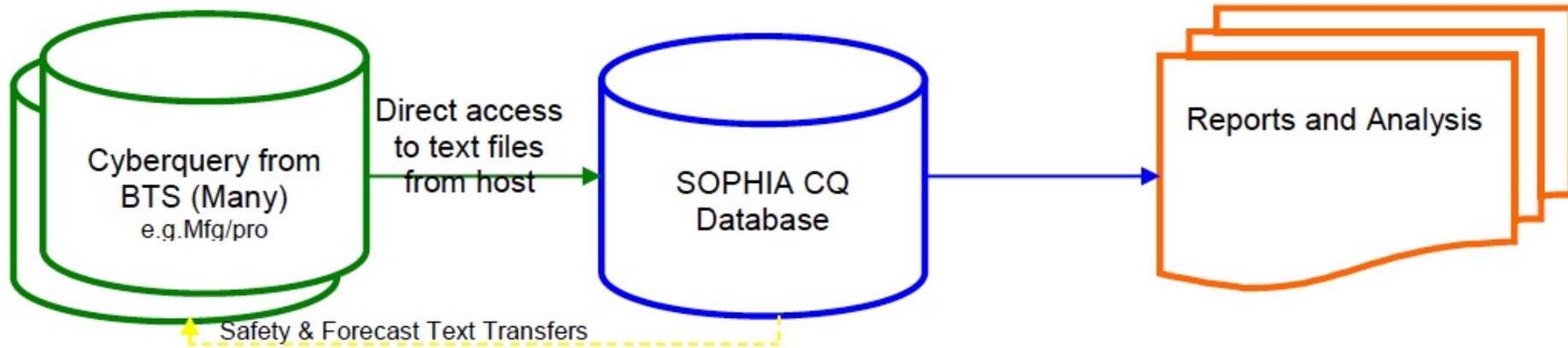**S**ales & **O**perations **P**erformance **H**istory **I**ntelligence & **A**nalysis

Sophia is a powerful tool to measure and record trends and planning information for any manufacturing/distribution business.

She collects data from your existing business transaction system 24/7 and provides reports and analysis to show you where to focus your efforts to improve your business.

Key Imported Data

Cyberquery from BTS (Many) e.g.Mfg/pro → Direct access to text files from host → SOPHIA CQ Database → Reports and Analysis

Safety & Forecast Text Transfers

- **Accounts Receivable** – entire debtors history at invoice level

- **Accounts Payable** – entire debtors history at invoice level

- **Sales** – entire sales history at invoice/item level

- **Quotes** – entire quote history at quote/item level

- **Forecasts** – entire forecast at item level (monthly by date)

- **Work Orders** - all work orders history at work order/item level

- **Sales Orders** - all sales orders history at sales order/item level

Key Imported Data

- **Purchases** - all purchase orders history at purchase order/item level

- **Distribution** - distribution orders history at order/item level

- **Stock & Planning** – all inventory for all sites/branch and other part grouping data (not bin or lot) including planned lead times, safety, min order qty, order policies.

- **Bin Stock** –all inventory for all sites/branch data by bin.

- **Movement** - all company inventory transactions

- **Work Order Allocations** - intense production picking

- **Operations** - summarised Shop Floor Data

- **Parts** - Parts Descriptions and Grouping data

Key Imported Data

- MRP Detail - details of mrp demand, supply

- Costs – parts, prices, product lines and other part grouping data

- Customer Parts - Customer items cross reference for companies to map customers to parts (will not work with duplicate customer parts for the same manufactured part).

- Customers - Customer information including market groupings, ABC class, Territories, states, country codes and rep codes.

- Suppliers - Supplier information including market groupings, ABC

Minimum Data Requirements

Minimum requirements

- Debtors,
- Invoices,
- Inventory,
- Inventory Transactions,
- Parts,
- Costs,
- Customers,
- Suppliers,
- Purchase Orders,
- Sales Orders,
- Work Orders,

Optional Information

- Creditors,
- Quotes,
- Bins,
- MRP Data,
- Planning Data,
- Production Recording,
- Forecasts and
- Customer Parts.

(Optional means reports for these areas may not be available)

Reports

- **Broad forecasts** can be calculated from historical averages and there are mechanisms in Sophia to % increase or decrease the averages forecasts.

- **Simple Forecasting** - same as last year , by default a 5% uplift will be applied to forecasts generated by SOPHIA.

- **Complex Forecasting** using many types of averaging and seasonality can also be used providing a better fit by using the past on particular parts to project which forecast type fits the best.

- **Budget** at Customer and Part level can also be generated automatically with a default 5% reduction over the previous year.

Revenue Trends
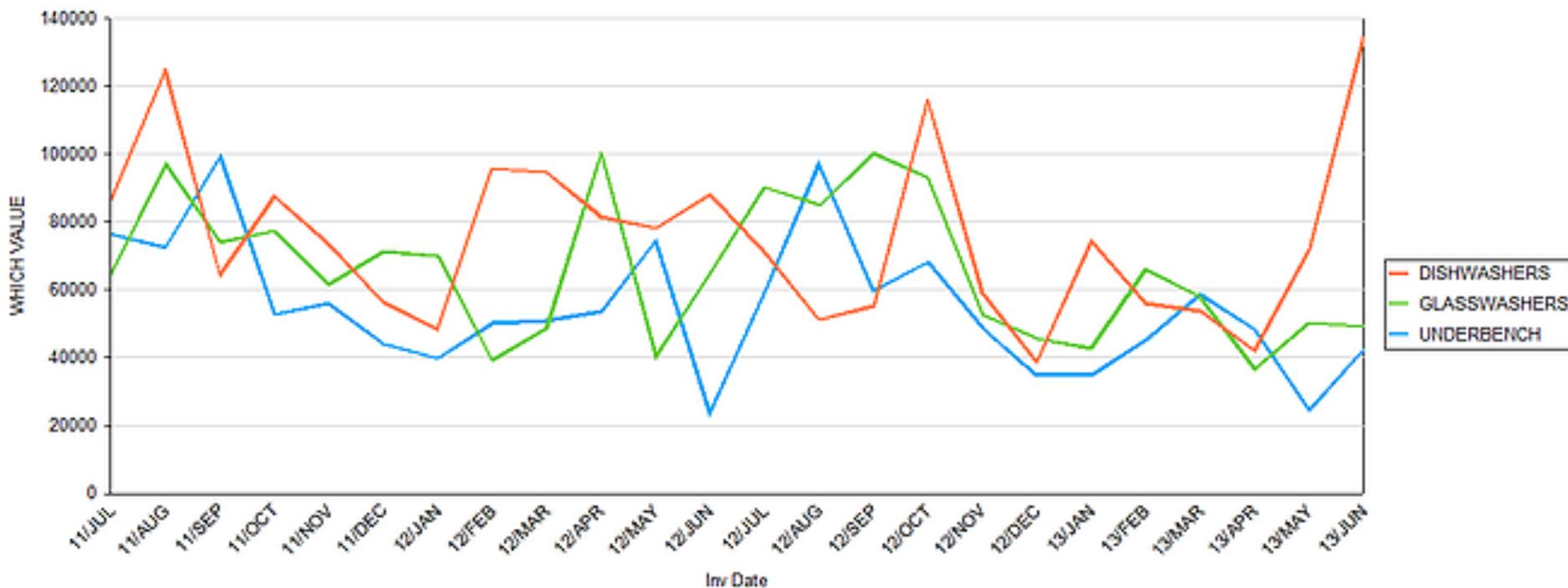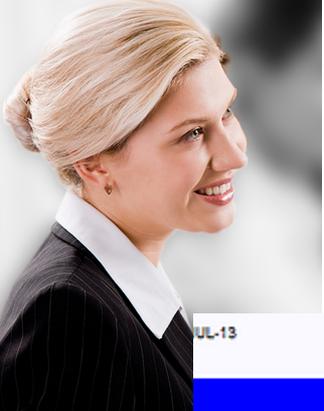

Invoice Revenue, Cost and Volume Trends by Year
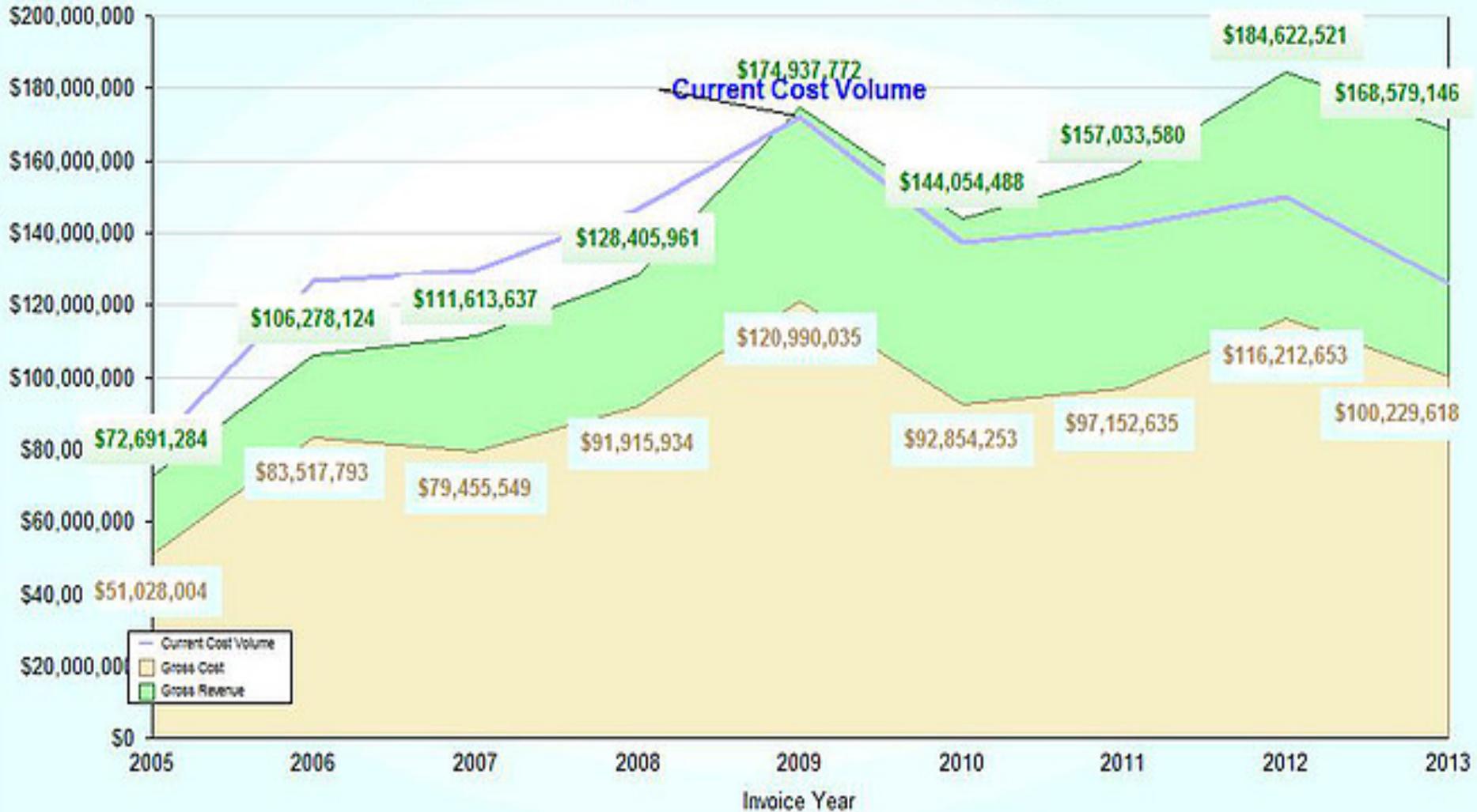
Sales Trends

Performance History in Your Business

SOPHIA

Performance History Exec Summary For SOP DEM NORRIS

Measure	Dimension		12Mths Avg	Target				Late
Forecast Accuracy by Item	% Accurate	☹	32	80	60	45	0	
Unforecast Demand Cost by Item	% Unforecast Deman	☹	-14	0	35	50	100	
Sales & Operations Sales Vs Forecas	% of Plan	☺	66	100	90	80	0	
Sales vs Budget at Current Cost	%Budget @Current	☺	52	100	95	85	0	
Sales Order Small Order Percentag	Small Ord %	☺	-70	0	10	15	9999	
Sales Order Discount %	% Disc	☺	-19	0	10	30	999	
Sales Order Percent Order Margin	% Order Margin	☹	47	55	20	15	0	
Sales Order Delivery Average Late D	Avg Days Late	☺	-7	0	2	5	9999	
Sales Order Delivery Performance by	% On Time	☹	73	100	80	60	0	
Sales Order Average LT Performance	Avg LT	☺	0	0	7	14	9999	
Sales Order Delivery RMA Percentage	% RMAs	☺	-2	0	3	6	200	

END OF REPORT

Green –   Orange - Line Management   Red – Executive Management Intervention

Customer and Inventory Analysis

Customer ABC Transaction Analysis

Combined Companies and All Branches/Sites

s	Customers		Payment OnTime%	Payment Avg Late Days	Avg Late Value	Value	Margin	% Margin	Transactions	% Transactions
	93	80% Revenue	0.0	-44	533399	3,361,889	1,524,771	45	7,916	63.3
	141	15% Revenue	0.0	-43	95728	637,478	330,068	52	2,417	19.3
	255	5% Revenue	0.0	-42	35502	222,393	129,892	58	1,621	13.0
	855	0% Revenue	0.0	-47	24931	0	-15,774	0	543	4.3
		REPORT TOTAL				4,221,760	1,968,957	47	12,497	100.0

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Purchase ABC Vendor Transaction Analysis

Combined Companies and All Branches/Sites

s	Vendors		Value	Standard Variance	% Std Var	Trans actions	% Trans actions
	27	80% Expense	1,230,878	-750,090	-60.9	856	36.2
	29	15% Expense	201,417	-124,006	-61.6	448	19.0
	50	5% Expense	64,096	-12,382	-19.3	315	13.3
	62	0% Expense	0	0	0.0	745	31.5
		REPORT TOTAL	1,496,391	-886,478	-59.2	2,364	100.0

Run date: 15-JUL-13   MANUFACTURING COMPUTER SYSTEMS

ABC Item Inventory Use Analysis

For Combined Companies and All Branches/Sites

Abc	Parts	Curr Inventory $StdCost		Issue Value	Trans actions	% T ac
A	192	2,037,389	80% Use	4,046,931	7,734	
B	326	747,546	15% Use	759,729	8,987	
C	802	373,615	5% Use	253,196	16,989	
D	2911	188,616	0% Use	0	0	

Demand, Production, Inventory and Capacity

— Capacity — Demand ☐ Inventory (FG) — Production

SOPHIA Implementation Process

Step 1 - Learning about your company

- Sign a Non Disclosure Agreement and have your data loaded into SOPHIA

- Verify data and identify known and unknown issues

- Identify urgent actions

- Evaluate your company KPIs

- Develop a primary cost benefit analysis

This will allow you to start discussions with all of the facts.

SOPHIA Implementation Process

Step 2 – Your S&OP Process

- Family analysis tools allow rapid load, spread, variations and Units of Measure (UOMs)

- Identify previous S&OP measurements

- Balance existing plans

This will allow you a rapid S&OP startup.

SOPHIA Implementation Process

Step 3 – S&OP KPIs

- SOPHIA will automatically define industry standards and simplified detail analysis.

- S&OP validity and effectiveness

- Identify issues and resolutions

- Evaluate inventory efficiency

- Identify risk and reward

This will remove arguments over KPI definitions.

SOPHIA Implementation Process

Step 4 – Other supply chain KPIs

- **Identify KPI Opportunities for** Customers, Inventory, Supply, Distribution and Production

- **Determine Data Integrity Level and Other Reporting**
    - Data Redundancy
    - Groupings Lead Times, Quantities

This will give you visible, standardised information to drive sustainable benefits.

SOPHIA Implementation Process

Step 5 – Identifying your opportunities

- Simplified and guided reporting and monitoring for:
  - Master Production Schedules (MPS)
  - Lead Time Analysis
  - Supply, distribution and Production Stability
- Pareto Analysis of customers, suppliers and warehouse
- Pareto Analysis of core business by margins

This will allow you to create linkage between all of your business activities

SOPHIA Implementation Process

Step 6 – Identifying your common business processes

- Analysis over every part of the business looking for opportunities to improve, multi system historical data

This will allow you to develop priority lists across your business.

SOPHIA Implementation Process

Step 7 – Review and feedback meeting

- Profound knowledge

- Dispute resolution on facts with proof and accurate data

- Isolate weaknesses

- Justification for cost benefits

This will allow you to develop short and medium term plans with your change group to save you money.

With Sophia in Your Business

SOPHIA will:

- Transform your supply chain in a shorter time period.
- Crystallise financial benefits to the company earlier.
- Removes much of the resource required to produce S&OP packs and other supply chain reports.
- Provide customised, automated weekly/monthly reports to key managers.
- Sustain the changes to your S&OP processes.
- Provide you with peace of mind.