

# Experience Harmony: Data Analytics

By: Shem Lehmann

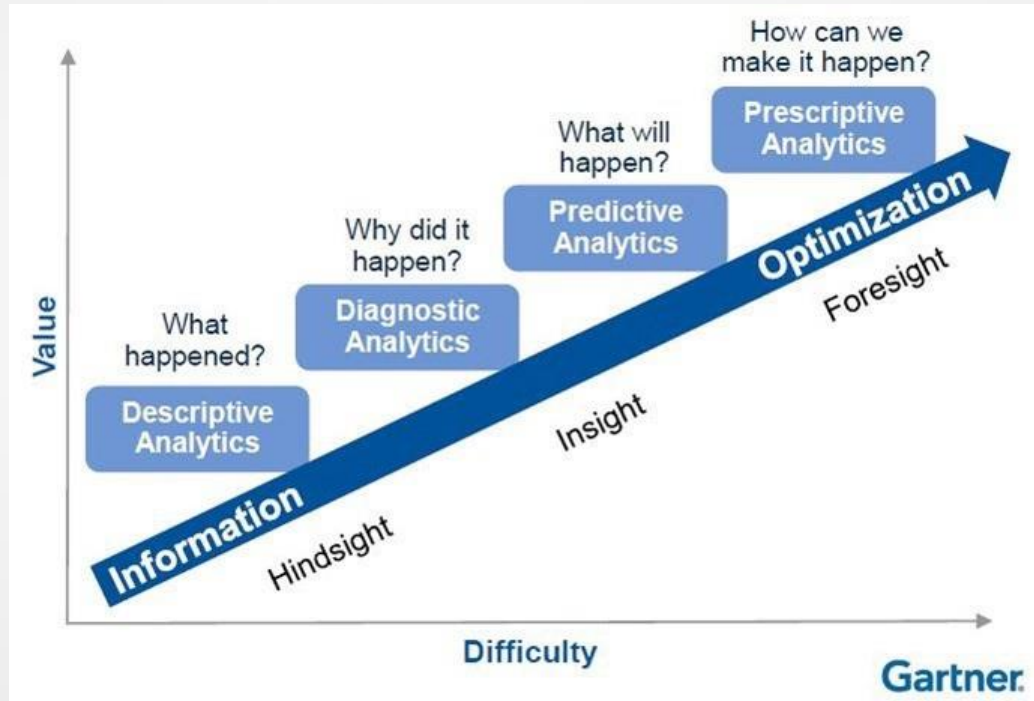
INNOVATIONS



**“Information is the oil of the 21st century,  
and analytics is the combustion engine”**

– Peter Sondergaard, Senior Vice President at Gartner

# Analytic Ascendancy Model



# Stages



# Stages



# Dangerous Assumptions

- You start at the bottom, advancing through the levels in sequence
- Each higher level brings more value than the lower level before it
- The way you manage these capabilities lie on the same spectrum

# What's the Main Goal?

## Data and Analytics Enables Everything in the Enterprise



Source: Gartner  
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**Gartner**

Affect *decisions*  
towards better  
outcomes

# How to Achieve it

Common denominator?

- **Descriptive analytics**
- **Diagnostic analytics**
- **Predictive analytics**
- **Prescriptive analytics**

Answer the right questions!



Combined

- **Descriptive analytics**
- **Diagnostic analytics**
- **Predictive analytics**
- **Prescriptive analytics**



# Partners



# What questions do you ask?

“By 2020, augmented analytics will be a dominant driver of new purchases of analytics and business intelligence”

- Gartner, (Nov. 2019)

# PM Optimization

Dashboard



Filters

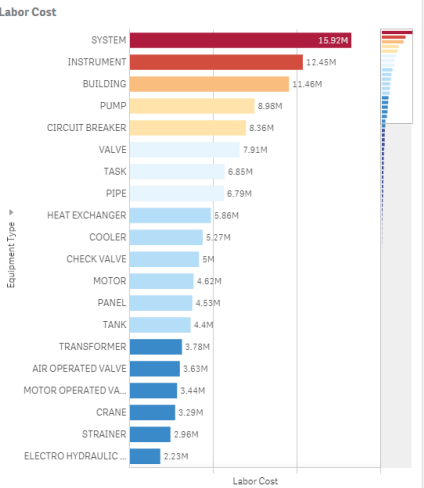
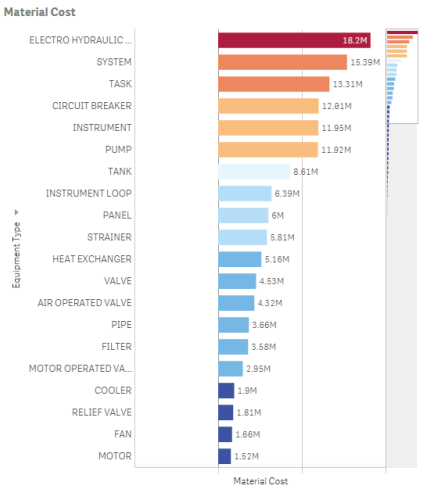
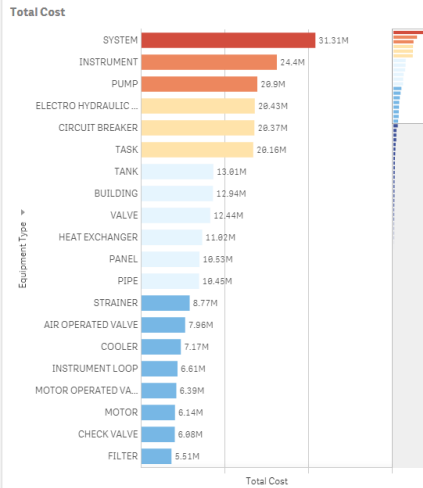
- Year
- Month
- System
- Criticality
- A
- B
- C
- D
- X
- Equipment Type
- Mode
- Online
- Outage
- Cost Type
- Capital
- M
- O&M
- Work Center
- Craft
- AP-928 Work Type

Total Cost  
**327M**

Material Cost  
**164.6M**

Labor Cost  
**162.4M**

Man Hours  
**3.16M**



# Inventory Management

Inventory Levels
CHAMPS

<b>Filters</b> <input type="checkbox"/> Overstock? No <input type="checkbox"/> Yes  <input type="checkbox"/> Understock? No <input type="checkbox"/> Yes  <input type="text"/> Create Date Year  <input type="text"/> Create Date Month Year  <input type="checkbox"/> Status Active Dead Inactive Obsolete  <input type="text"/> SKU  <input type="text"/> SKU Description  <input type="checkbox"/> Location HOLD WHS XSPR	Total SKUs <h2 style="color: teal;">163.5K</h2>	Inventory Value <h2 style="color: teal;">\$33.2M</h2>	OverStock On-Hand Value <h2 style="color: teal;">\$7.6M</h2>	Restock Cost <h2 style="color: teal;">\$205K</h2>
	Quantity On-Hand <h2 style="color: teal;">2.6M</h2>	Stock Capacity <span style="color: teal;">—</span>	<div style="text-align: center;"> <b>Minimum and Maximum Levels of Inventory</b> </div>	
	Maximum <h2 style="color: teal;">1.08M</h2>	Overstock <span style="color: orange;">—</span>		
	Minimum <h2 style="color: teal;">369.7k</h2>	Understock <span style="color: orange;">—</span>		

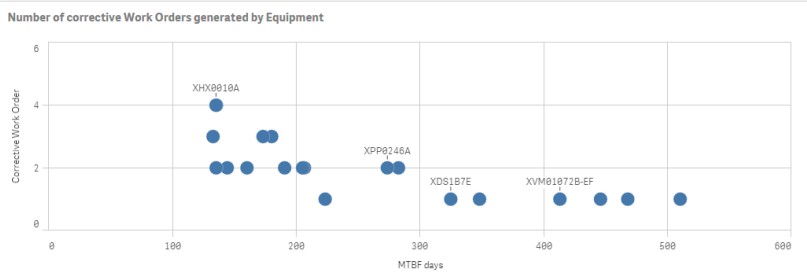
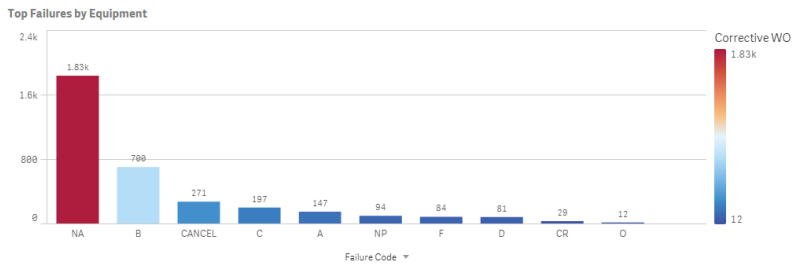
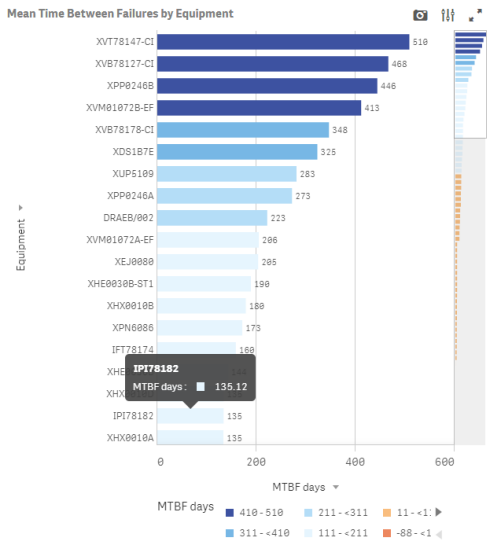
# Corrective Work & MTBF

## Mean Time Between Failures



Work Order ID	Work Orders 35,461	PM Work Orders 29,55k	Corrective Work Orders 5,912	Failures 19,046	Total of Equipment 13,419	Down Time Duration Hrs 144	% Corrective WO 16.7%
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- Corrective Work Orders
- No
- Yes
- Equipment ID
- Equipment Name
- Equipment Model
- Equipment Class
- Equipment
- TE
- Equipment Type
- ACCUM
- Admin
- ANNUN
- BATT
- Equipment Status
- Active
- Equipment Not Yet Installed
- Inactive
- Pending
- Work In Progress



# LIVE Demo