

# COSTS OF DOWNTIME IN THE MANUFACTURING INDUSTRY



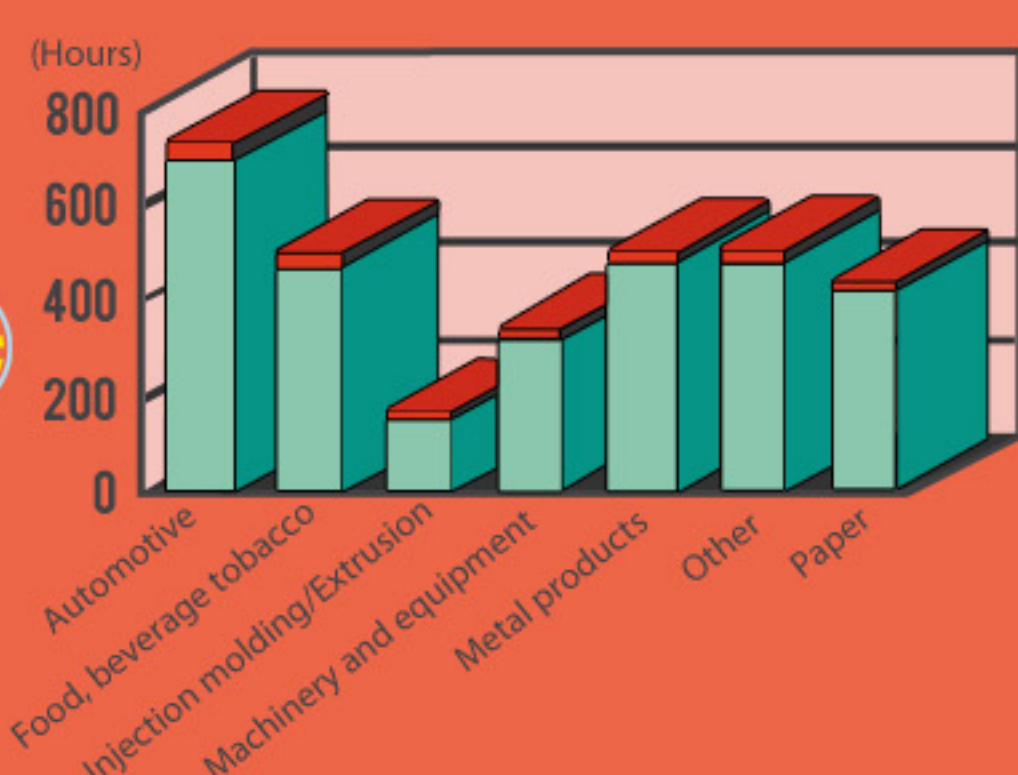
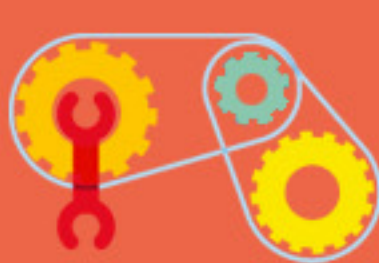
## DOWNTIME COSTS CAN BE DIVIDED INTO 2 MAJOR CLASSES:

**Tangible and Intangible.** Tangible costs are those which are relatively easy to quantify. Intangible costs are difficult to put a dollar figure on but may be even more significant than tangible costs. **Tangible Costs:** Lost Capacity, Lost Production, Direct Labor, Inventory Product Loss **Intangible Costs:** Responsiveness, Stress, Innovation

## TRUE DOWNTIME COST

Includes a vast array of wasted business support costs and lost business opportunity costs because resources were needed to rectify a downtime incident that probably did not need to happen.

Average total annual downtime for industry  
Average monthly downtime for industry



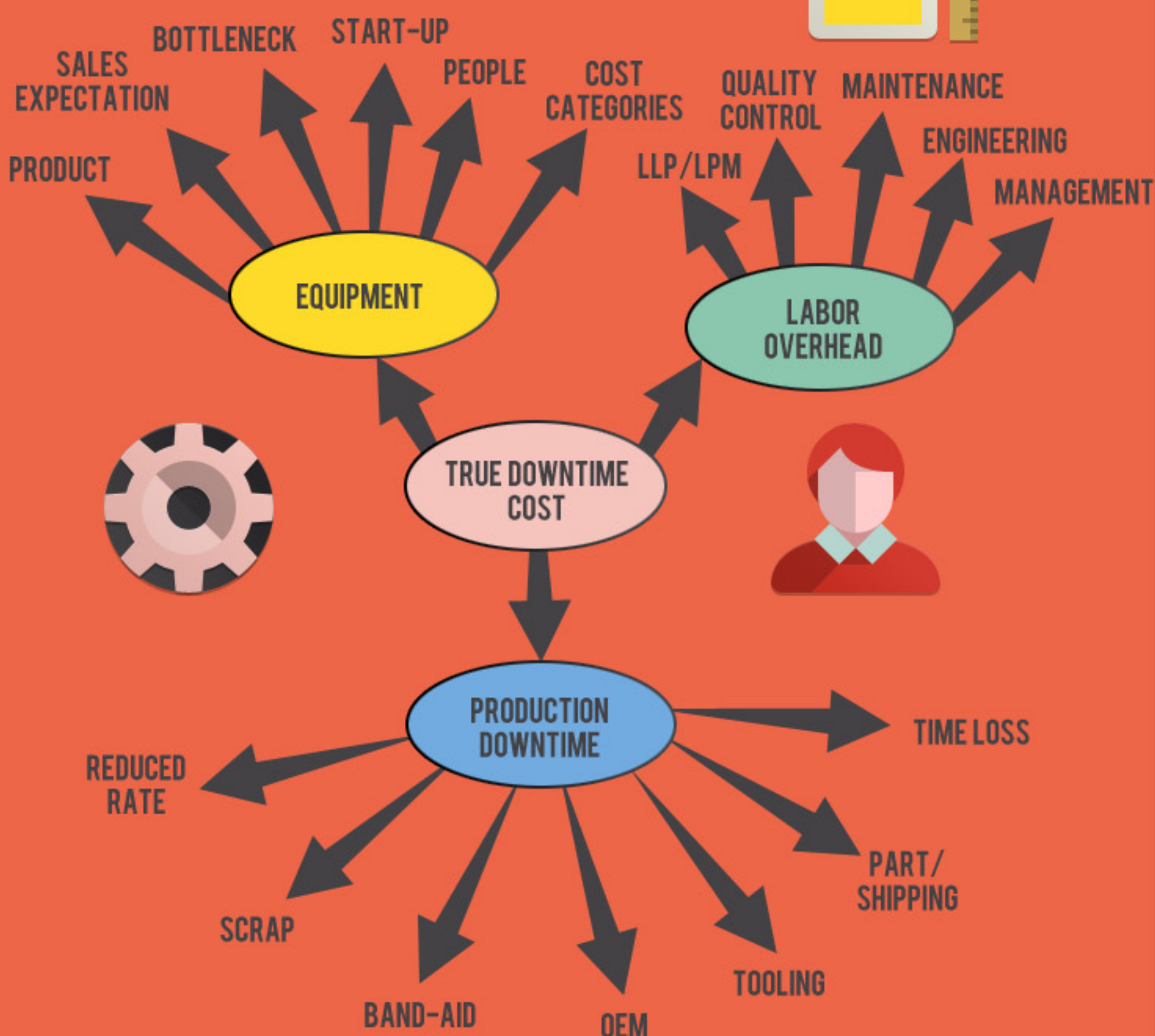
### Downtime in the Automotive Industry-

In 2006, auto industry manufacturing executives showed stopped production costs avg. \$22,000 per minute. \$1.3 Million per hour of downtime

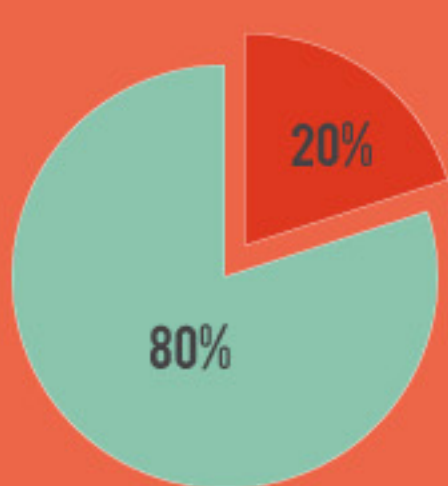
#### The Fix-

53% of executives all agreed - reduction of downtime through predictive and preventative maintenance.

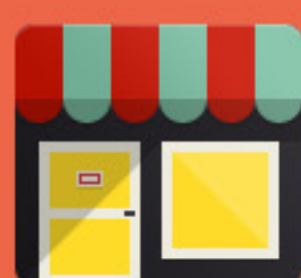
## FACTORS AFFECTED BY DOWNTIME



## INDUSTRIAL FACILITIES THAT ESTIMATE TDC



Almost every factory loses at least 5% of its productive capacity from downtime, and many lose up to 20%. Of the 20% that can estimate their downtime usually underestimate TDC by 200% - 300%



## A TYPICAL MANUFACTURER CASE STUDY

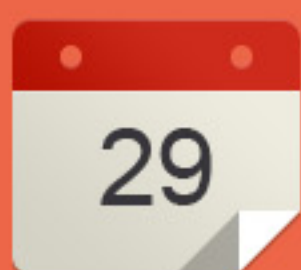
### PROBLEM:

- Backlog of work orders 4 months over due
- Only focused on emergency repairs
- 20% Equipment downtime
- Labor hours & parts uncategorized and difficult to track

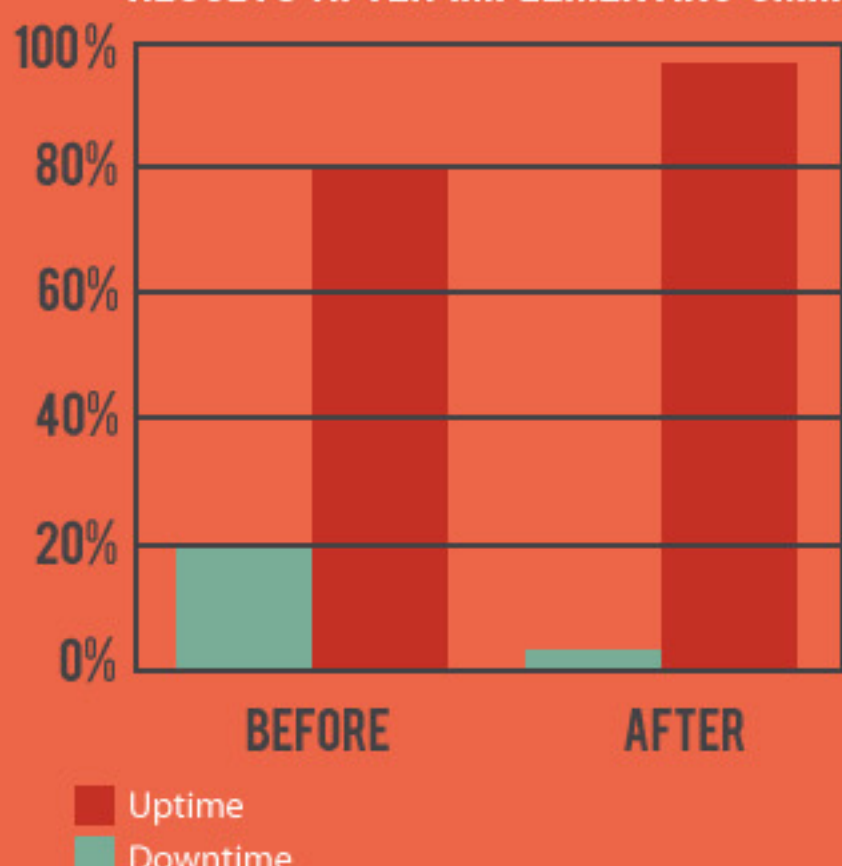


### FIX:

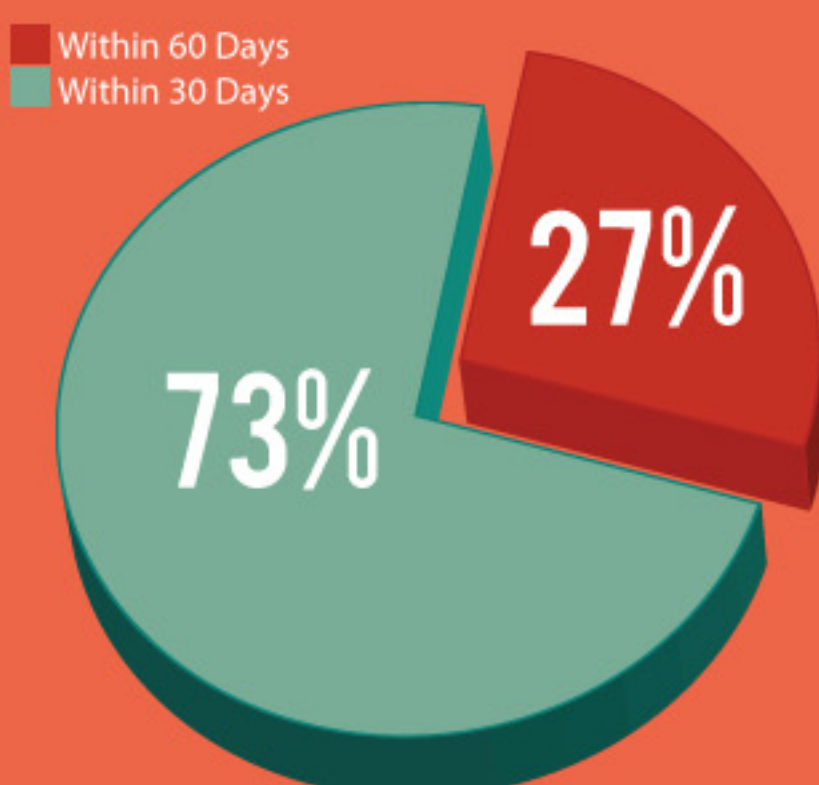
- Improve the Preventative Maintenance Program
- Automated key metrics from engineering, production, inventory control, and maintenance to a central dashboard.
- Dashboard gave management up-to-the minute view of
  - o Downtime by production line
  - o Work order aging
  - o Work order throughput
  - o Open work orders by type



### RESULTS AFTER IMPLEMENTING CMMS



### BACKLOGGED WORK ORDERS COMPLETE



## SOURCES:

<http://www.anexio.com/blog/the-true-cost-of-downtime-in-the-manufacturing-industry/>  
<http://packagingindustry.fraingroup.com/2011/10/20/calculating-downtime-costs/>  
[http://www.isa.org/Content/ContentGroups/InTech2/Departments/Channel\\_Talk/20069/When\\_True\\_Cost\\_of\\_Downtime\\_Is\\_Unknown,\\_Bad\\_Decisions\\_Ensnare.htm](http://www.isa.org/Content/ContentGroups/InTech2/Departments/Channel_Talk/20069/When_True_Cost_of_Downtime_Is_Unknown,_Bad_Decisions_Ensnare.htm)  
<http://news.thomasnet.com/companystory/Downtime-Costs-Auto-Industry-22k-Minute-Survey-481017>

## PRESENTED BY:

