



## Project Scope

- The project aims at the calibration approval process for the quality control tools done by the material planning managers
- Availability and Usage balance of the quality control tools used on hangar floors
- Data analysis based on historical 2 year period

## Problem Definition

- Inefficient use of database of the company ERP system
- Long calibration approving process
- Poor tool availability and usage planning

## Objectives

- Develop a dynamic tool/system to support manager with calibration approval process and document decisions made
- Highlight Equipment Families with Low/high usage to proactively increase/decrease number of available units and required calibration

## Data Analysis

- 66% tools have not been categorized
- 36% tools had not been used in past 2 years.
- 40% tools did not complete any status update in past 2 years
- 1.3% tools are having low usage (<5% of their lifetime)
- 2.4% tools are having high usage (>95% of their lifetime)

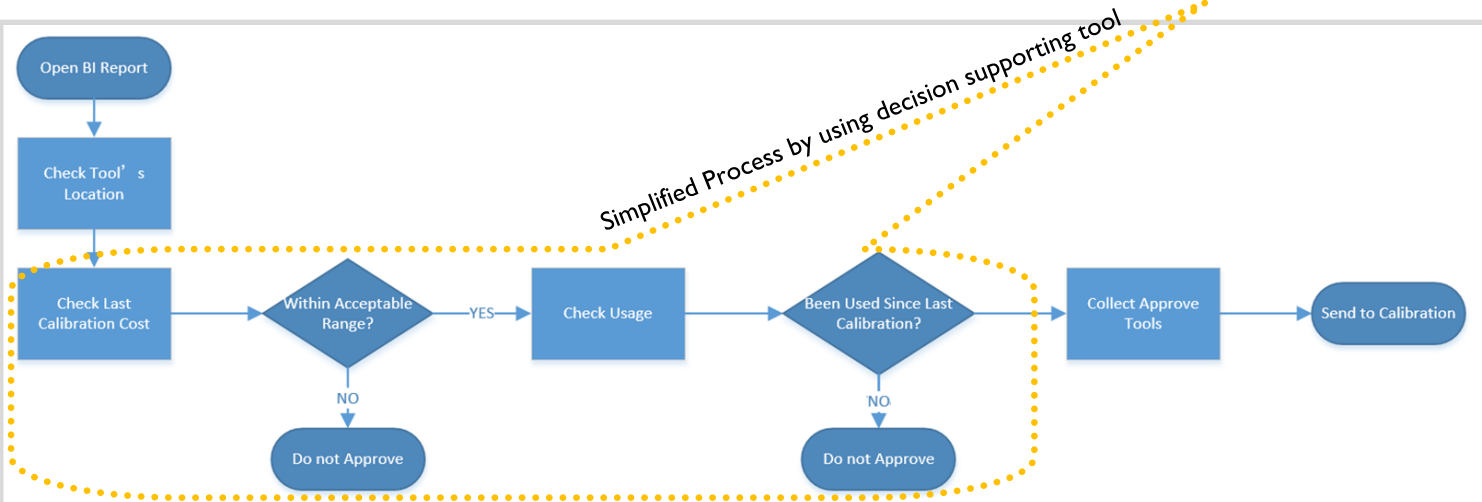
## Decision Support System

- Type in desired asset number/ QC serial number, then click "Check" button to receive relative information about the asset
- Tools with zero usage since last calibration are highlighted in red. High usage tools are highlighted in yellow
- Tools do not need send to calibration are labelled.
- Tools that are currently in use are highlighted with yellow and by double clicking, the system will show the number of other available tools for swap and balancing the usage.

Sort Data	Calibration Needed?	Asset Number	QC Serial Number	Description	Family (CAT16-17)	Number of Alternatives (T1 in its Family)	Last Call Result	Last Call Completed Date	Number of Usage	Last Calibration Cost (Last cost in PO)	Total Cost (Selected Time Frame)	Current Status
	No	47648	QC03742	OUTSIDE MICROMETER 0"-1"	-	261	PASS	2020-08-06		46.4	46.4	T1
	No	282569	QC09426	DIGITAL CALIPERS 0-12	-	261	CUSTOM	2020-04-09		NO PO Data	NO PO Data	T1
	No	282570	QC09427	DIGITAL CALIPERS 0-12	-	261	CUSTOM	2020-04-09		NO PO Data	NO PO Data	T1
		45019	QC07805	POWER SUPPLY	T49-165		1 FAIL	2020-04-15	27	69	69	T2
		45273	QC07146	BANDING TOOL 1/8	T42-4		3 PASS	2020-07-17	1	501.96	501.96	T1
	No	44928	QC07695	HIOKI RESISTANCE HI-TESTER	T40-131		5 PASS	2019-10-15		NO PO Data	NO PO Data	TV

Available Tools in Each Family		
Current Status	T1	
Row Labels	Count of Asset Number	Sum of T2 Count
-12	3	113

Usage Summary in Each Family		
Row Labels	Count of Asset Number	Sum of T2 Count
-100	1	1
-12	15	197



## Conclusion & Recommendation

- Complete and fill Family Categorization for quality control tools in J. D. Edward.
- Once tools are finished using, operators should scan the tool immediately to keep the data up to date.
- Operators should input the name of the tools associated with the keywords association. The keywords association should reference to the database with all the tools' name in the correct spelling.