Getting to Know Minitab

ASQ 0701 clinic

August 2015

Agenda

- What this clinic is…
- What this clinic is not…
- Why use Minitab
- Introduction to Minitab (v16)
  - Screen Navigation
  - Data Entry
  - Tools navigation

What this clinic is…

- …a collection of experiences over 15 years of using Minitab.
  - Used during six-sigma certification training and project application

What this Clinic is not…

- …not a complete and detailed explanation of Minitab
  - Too many functions to describe in this clinic format
- …not six sigma training

Why use Minitab?

- **Better than Excel for statistical analysis**
  - Formulas are verified at Minitab
  - Some formulas require the use of tables
    - Much easier in Minitab than Excel
- **Most six-sigma trainers use Minitab to support the statistical tools**
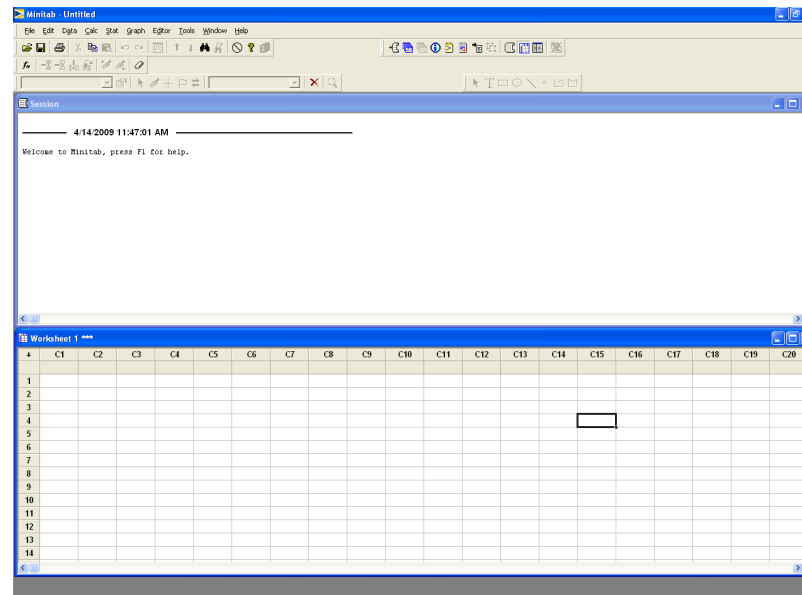- **Ease of use for complex initiatives such as GR&R, and DOE**

Screen Navigation

- Each project consists of a
  - Session window
  - One or more worksheet(s)
  - One or more graphic windows
  - Project summary window

Session window

- Where non graphical outputs are shown

- Also can be used to input "Minitab" code

Worksheet

- Can have multiple worksheets
  - Only one can be active at a time
    - Designated by *** next to spreadsheet name
  - Clicking on worksheet makes it active
  - Also by right clicking, can rename worksheet
- NOT THE SAME AS EXCEL
  - Cannot create functions

Demo…

Graphic Screens

- Display graphs, charts, etc
- Can have multiple screens

Project Summary

- Shows everything done for the given project

Data entry

- **Data can be entered by**
  - Typing in the worksheet
  - "CCP" from Excel ✂️ 📚

- **Data is automatically designated as**
  - Numerical
  - Text (t)
  - Date / time (d)
  - Can change from different types

- **Calculator function**
  - Can use columns as inputs to calculations

- **Header row in gray**
  - Does not accept # in header

Demo…

Tools Navigation

- Common / most useful features
  - "*Ctrl-e*"
    - Re-run the last command
  - Stacking columns
    - Allows to put multiple column into one column for analysis (*data > stack*)
  - Stat-guide
    - Statistical support
- Saving files
  - Can save the entire project, or graph, or worksheet
- Report
  - Append information to report for report generation
  - Can also CCP into MSWord

Key tools

- **Data**
  - Stack
  - Change code type
- **Calc**
  - Calculator
  - Make patterned data
    - Useful for Gage R&R
  - Random data
- **Stats**
  - Basic statistics
  - Quality tools
- **Graph**

Demo…

My Background

- Minitab user for over 15 years
  - Started with v9
- Versed in JMP as well
- MS Applied Statistics
- Former QE/OpEx Director of Allergan
- Now open to consulting
  - Contact me via: ppatel0415@gmail.com or 805-760-1094.