DSO 401: Business Information Systems

USC Marshall School of Business

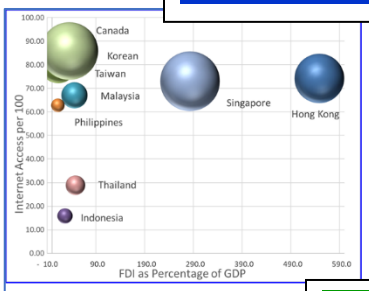
Data Sciences & Operations

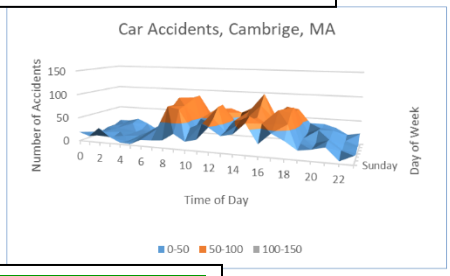
More Information
Contact
Francis Pereira, Ph.D.
Assoc. Professor
pereira@marshall.usc.edu

- Provide an applied understanding of how "spreadsheet applications" are used to analyze business information
- Master the use and design of spreadsheets with "Microsoft Excel" for business information analysis in the areas of Finance, Information Systems, Marketing and Operations.
- Understand how to use application software to analyze business cases and improve the effectiveness and efficiency of decision-making processes

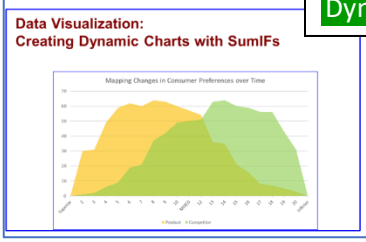
- Systematically build spreadsheet-based business and other models
- Present data effectively through the use of graphs, pivot tables and other data visualization tools
- Apply various logical, lookup and reference functions to extract appropriate values from datasets
- Effectively apply advanced data analytic tools, including advance filters, scenario managers and the solver to achieve optimal solutions in data analysis
- Utilize macros to effectively increase efficiency in data extraction and analyses
- Create basic custom functions

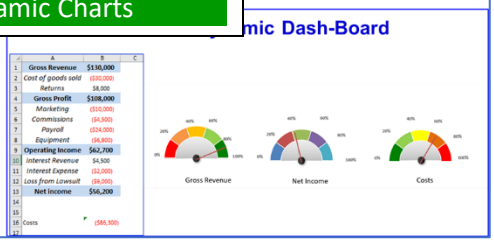
What Can Excel Do?





Dynamic Charts

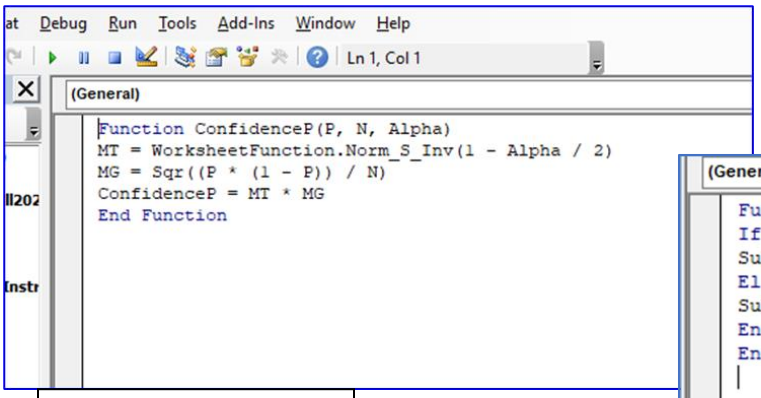


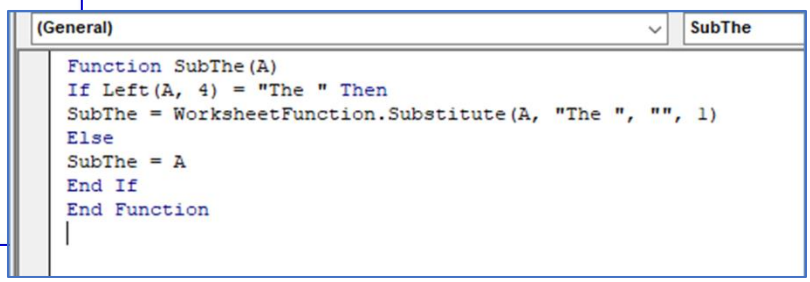


TOPICS COVERED

Workshop #2
Conditional Formatting & Data Visualization
Workshop #3
The IF Function: The workhorse of Excel
Workshop #4:
Lookup and Reference Functions
Workshop #5:
Understanding Array Functions & Syntax
Workshop #6
Excel's SUMIFS, Date and Time Functions
Workshop #7
Choose, Errors & Pivot Tables (I)
Workshop #8
Pivot Tables (II) & Gauge Charts
Workshop #9
Sorting, SubTotal, Outline & Advanced Filter
Workshop #10
Text Functions & Regression Review
Workshop #11
Indirect & Advance Topics (I) Goal Seek Data Tables
Workshop #12 & #13
Advanced Topics (II) Macros, Custom Functions & Solver

Custom Functions





Complex Functions

=IF(E2-F2*XLOOKUP(C2,Reference_Table!$A$2:$A$6,Reference_Table!$D$2:$D$6)>0,(E2-F2*XLOOKUP(C2,Reference_Table!$A$2:$A$6,Reference_Table!$D$2:$D$6))*XLOOKUP(C2,Reference_Table!$A$2:$A$6,Reference_Table!$E$2:$E$6),0)