

DSO 401: Business Information Systems

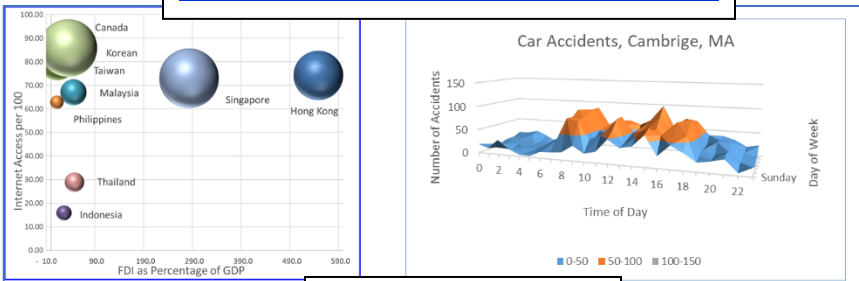


More Information Contact
Francis Pereira, Ph.D.
 Assoc. Professor
 pereira@marshall.usc.edu

- 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?



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

Dynamic Charts

Data Visualization: Creating Dynamic Charts with Sumifs

Dynamic Dash-Board

1	Gross Revenue	\$138,000
2	Cost of goods sold	(\$30,000)
3	Returns	\$8,000
4	Gross Profit	\$108,000
5	Marketing	(\$10,000)
6	Commissions	(\$4,000)
7	Payroll	(\$54,000)
8	Equipment	(\$6,000)
9	Operating Income	\$62,000
10	Interest Revenue	\$4,300
11	Interest Expense	(\$2,000)
12	Loss From Interest	(\$2,000)
13	Net Income	\$66,300
14		
15	Costs	(\$84,500)
16		

Custom Functions

```

Function ConfidenceP(P, N, Alpha)
MT = WorksheetFunction.Norm_S_Inv(1 - Alpha / 2)
MG = Sqr((P * (1 - P)) / N)
ConfidenceP = MT * MG
End Function
    
```

```

Function SubThe(A)
If Left(A, 4) = "The " Then
SubThe = WorksheetFunction.Substitute(A, "The ", "", 1)
Else
SubThe = A
End If
End Function
    
```

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)