# BUSINESS COMMUNICATION CENTER DATA ANALYSIS

MIS0855 Final Project 12/4/14

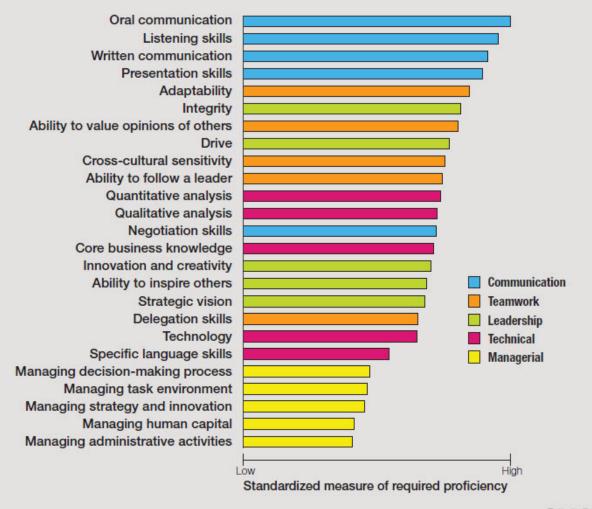
- Students visiting the BCC (Business Communication Center) expect to receive guidance on writing papers for various Fox School of Business classes.
- Our main objective is to analyze BCC tutors' feedback to better serve students and help the BCC run more efficiently.

Importance:

#### PROBLEM STATEMENT

#### SKILLS COMPANIES DEMAND IN NEW GRADUATE BUSINESS SCHOOL HIRES

Based on a Standardized Measure of Required Skill Proficiency





- ▶ Data Range: All appointment dates from August 20<sup>th</sup> to December 3rd
  - Over 1,500 data points
- ► Key Elements of the Data:
  - Class Standing
  - Major
  - ► First Language
  - ► BCC Tutor Name
  - Course Name
  - Professor
  - Notes from the Tutor: Structure, Grammar, Overall
- Retrieved by the Business Communication Coordinator: Jessica Renaud

# DATA DESCRIPTION

- ► First steps: Clean the Data
  - Issues with: Major, Class, Course, and Unstructured Comments from BCC Tutors
- Evaluate data quality
  - ► Inconsistent registration form fields
- Sentiment Analysis
  - ► Average sentiment: 0.75
  - ► Graphed all 1,500 into a histogram
- ▶ Word Frequency to identify commonly used words by tutors.

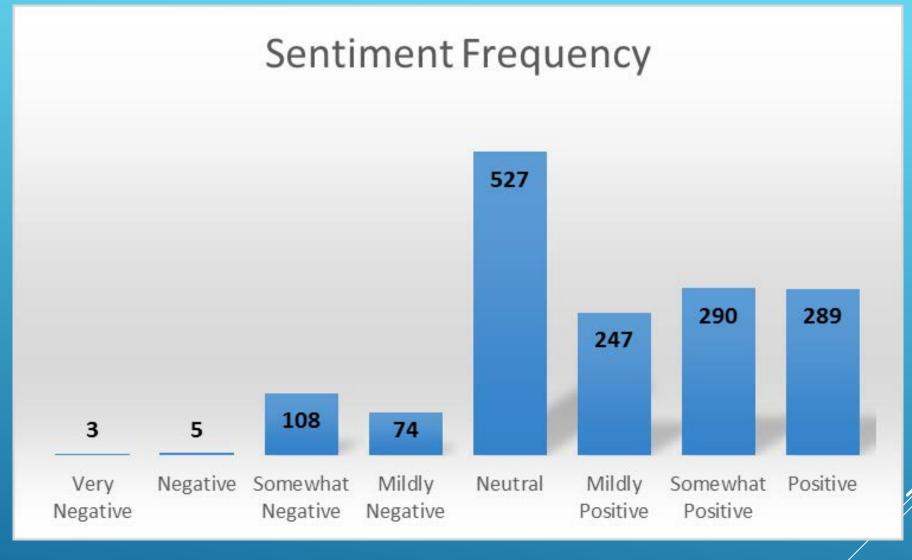
# DATA ANALYSIS – SENTIMENT ANALYSIS

- ► Class Standing:
  - ▶ Freshmen: 2.357
  - ▶ Juniors: 1.059
- ▶ Major
  - Entrepreneurship and Marketing: 3
  - ► Economics and MIS: -.039
- ▶ Language
  - ► Arabic: 1.64
  - ► Portuguese: -0.49

Class Standing		Major Entrepreneurship and Marketing	3.000
Freshman	2.357	Risk Management and Insurance/Human Resource Ma	2.670
Junior	1.059	International Business and Risk Management	2.600
		Finance, Risk Management, and MIS	2.500
Senior	1.169	Finance and MIS	2.259
Sophomore	1.674	Entrepreneurship	2.033
-		Undeclared	1.750
		Management Information Systems	1.716
First or Home		Human Resources Management	1.625
Language		Business Management, Human Resource Administrati	1.600
Arabic	1.640	Actuarial Science	1.383
Other	1.506	Entrepreneurship and Innovation Management	1.375
Other		Marketing	1.375
English	1.450	International Business and Marketing	1.333
Korean	1.380	Marketing and Supply Chain Management	1.250
		Accounting	1.154
Chinese	0.851	Finance and International Business	1.119
German	0.500	Accounting and MIS	1.077
Spanish	0.481	Legal Studies	1.052
-		International Business	0.899
French	0.445	Accounting and Finance	0.854
Russian	0.426	Accounting and Risk Management	0.786
Dortuguess	-0.400	Risk Management	0.782
Portuguese -0.400		Finance and Risk Management	0.769

# DATA ANALYSIS





DATA ANALYSIS



F1	
ENGAGED	707
APPOINTMENT	497
SESSION	432
SEEMED	387
QUESTIONS	345
WORK	327
WHAT	312
ASKED	290
RECEPTIVE	247
OVERALL	223
POLITE	209
NEEDED	189
GOOD	187
PLEASANT	177
LOT	174
MORE	163
EDITS	160
FEEDBACK	153
CHANGES	142
UNDERSTANDING	136
PROFESSOR	134
UNDERSTAND	133
THROUGHOUT	133
ASSIGNMENT	132

ENGAGED	ASKED	FEEDBACK	WRITING			BY			OR		LIKE		DUE			
	RECEPTIVE	CHANGES	HELP	ABLE										Bi	T	
	RECEPTIVE		PRINTED											$\perp$		
APPOINTMENT	OVERALL			ONE						+						
						TELL									$\prod$	
	POLITE			OVER	MOST		FIX									
	NEEDED		LITTLE	SURE	BODY									$\coprod$		
	GOOD		IDEAS		SEEM		JOB					$\Box$				
SEEMED			THEY	THINK	BACK											
	PLEASANT	WANTED		THINGS	2	IDEA										
QUESTIONS	LOT	MINUTES	FIRST	NICE		FELT										
	MORE	MINOTES	THEM	END		OFF										
WORK	EDITS			WASNT												
	LUITO		WELL	MANY												

# DATA ANALYSIS

- ▶ 1) Better data quality during registration process
- ▶ 2) Develop a KPI Ask tutors to rate sessions from 1 10 (in addition to comments)
- ▶ 3) Assign tutors to students based upon:
  - ► Level of Tutor Expertise
  - Demographic of Student
- ▶ 4) Efficient Scheduling
  - ► Higher Paid tutors to handle demographics with lower sentiment scores

# RECOMMENDATIONS

- 1. Dataset provided by BCC's Jessica Renaud
- 2. "Employers Want Communication Skills in New Hires." *The Official GMAT Blog.* N.p., 07 Aug. 2014. Web. 04 Dec. 2014.

# SOURCES