INNOVATE, ENGAGE, AND IMPACT: EXPERIENTIAL LEARNING CASE USED TO MEET NEW AACSB STANDARDS

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ABSTRACT

In 2013, AACSB International published its revised Standards recognizing the dynamic environments of both business schools and the business world. The catalyst of change includes fantastical advances in technology combined with Generations Y,Z, and (yes) Alpha who have adapted as wireless, multi-tasking, multi-device savants. These students have developed amid a plethora of stimuli and expect the same from their business education environment. This paper describes the use of experiential learning via the innovative, in-the-cloud ProBanker Simulation that engages students thirst for new technological experiences and their competitive natures. During the process students recognize that the skills and analytics involved can be applied to any business entity not just a financial intermediary.

INTRODUCTION

The majority of business students currently enrolled are millennials which includes Generation Y (those born between 1981 and 1994) and part of Generation Z (those born from 1995 and 2009). Millennials are achievers that are both technologically- and team-oriented (Howe and Strauss, 2000). These easily bored multi-tasking students are more likely to be Tweeting, posting, or texting as listening to a traditional lecture by their finance professor. Hence, a stimulating experiential learning exercise is needed: one that appeals to their millennial characteristics and prepares them professionally.The application innovated at the personal level by using in-the-cloud ProBanker technology (Flannery[1] and Flood) in which a self-selected group of 3-4 students become the

[1] Dr. Flannery is now the chief economist and director of the Division of Economic and Risk Analysis (DERA) of the U.S. Securities and Exchange Commission.

senior management team for a commercial bank. The business environment is usually 6-8 banks competing in the same market. Each quarter each senior management team has to evaluate its competitive environment and make strategic rate setting, advertising, dividend, and stock buyback decisions. This experiential learning process impacts professionally as students learn that marginal revenue, marginal cost, and risk-return tradeoffs are essential to all business entities regardless of size, geographic location, and product/service provided. Finally, sustained engagement was achieved by systematically integrating the process throughout the semester.

The experiential learning application was included as part of the Financial Institution Management course. This course is designed for advanced finance, economics, or accounting majors. The semester course is taught within the context of risk management including the measurement of interest rate, credit, liquidity, and market risk as well as the methods and markets used to mitigate these risks. The course has traditionally served as the capstone finance course taken by graduating seniors. Thus the process serves to develop and hone critical thinking, problem solving, teamwork, and communication skills as senior transition to real world and real work.

The process begins with an introduction to the bank business model and a compare/contrast assignment with a traditional product company. Once students have a rudimentary understanding of bank financial statements, ProBanker is introduced but not at the competitive level; this is the autobank segment of the assignment. Upon completion of the autobank assignment, students now have a fundamental understanding of the financial decisions that underpin banking and move forward to the competitive portion of ProBanker. After eight quarters of simulation, the "Master of the Market" is crowned.

THE BUSINESS MODEL: WEEKS 1 - 4

Few undergraduate business students are versed in the financial statements associated with banks and other financial intermediaries. Most introductory accounting and finance courses teach accounting in a manufacturing and/or retail environment with rare mention of service firms. Hence, the primary purpose of this assignment is to teach students how to read and begin to analyze a bank's financial statement.

The assignment is a critical incident that focuses on nomenclature and line items associated with assets, liabilities, equity, and the income statement in the financial institution environment. This is followed with a brief introduction to some basic return on asset (ROA) and return on equity (ROE) analysis to contrast how profitability is achieved for the two organizations. The use of Apple Computers is used to help students see the comparisons between the financial institution Webster Financial Corporation and a manufacturing/marketing company (Roland, Aktas, and Stanley, 2008).
Many texts now provide a similarly formatted case (Saunders and Cornett, 2014).

Each student submits written answers to the case questions. These questions are included in the assessment of the first four weeks of the course and as part of the course grade for each student.

PROBANKER AUTOBANK: WEEKS 5 - 8

The ProBanker software allows students to enter financial decisions such as lending rates, deposit rates, and reserve estimations into a program that uses faculty imposed economic conditions to simulate the result of these decisions on the market value of the financial institution. The autobank function allows the students to enter

and re-enter decisions as a pedagogical tool. The software is cloud based and menu based to maximize instructor versatility.

Students are instructed to self-select teams and complete the first Autobank assignment for ProBanker. Each group member must have a formal job title and description, *e.g.* CEO, CFO, etc. Students are instructed to research other institutions' Executive Committee compositions and adapt to their specific institution.

While the suggested ProBanker Exercise 1: Pricing Bank Products is used, a supplemental EXCEL spreadsheet (see Tables 1 and 2) is given to students to guide them through the process. The Autobank feature allows students to simulate inputting decisions and their consequences on the firm's financial condition in a static rather than dynamic environment.

Each group submits a professional memo that compares the net return on assets to the all-in cost of loanable funds. The memo must address if each line is profitable, and if not, make appropriate suggestions that make it so.

Upon completion of Exercise 1, students are given ProBanker Exercise 2: Choosing the Most Profitable Loan and Deposit Rates but again with a supplemental EXCEL spreadsheet to guide them (see Table 3). Students remain in Autobank mode to complete the pedagogical part of the application.

Exercises 1 and 2 are included in the assessment of the second four weeks of the course and as part of the course grade for each student.

TABLE 1
ASSET RETURN CALCULATIONS

	Fed Funds Sold	Fixed Rate Loans	Floating Rate Loans	Installment Loans	Mortgages
Contract Rate	4.2300%	9.0000%	8.2300%	11.0000%	9.0000%
Operating Costs	0.4400%	0.8000%	0.8000%	1.9451%	0.5846%
Advertising				0.2975%	0.0986%
Expected Default Losses		0.4115%	0.4515%	0.7358%	0.0368%
Net Return	3.7900%	7.7885%	6.9785%	8.0216%	8.2801%
		BOND1Q	BOND2Q	BOND3Q	BOND4Q
Contract Rate		4.2300%	4.8300%	5.0300%	5.2300%
Operating Costs		0.8000%	0.4000%	0.2667%	0.2000%
Advertising					
Expected Default Losses					
Net Return		3.4300%	4.4300%	4.7633%	5.0300%
		BOND5Q	BOND6Q	BOND7Q	BOND8Q
Contract Rate		5.4800%	5.7300%	5.9800%	6.2300%
Operating Costs		0.1600%	0.1333%	0.1143%	0.1000%

Advertising				
Expected Default Losses				
Net Return	5.3200%	5.5967%	5.8657%	6.1300%

TABLE 2
LIABILITY COST CALCULATIONS

	Fed Funds Purchased	Demand Deposits Retail	Demand Deposits Corporate	Passbook Savings	CDs (1Q)	CDs (2Q)	CDs (4Q)	Retail CDs	IRA
Contract Rate	**4.2300%**	**0.0000%**	**0.0000%**	**5.0000%**	**4.2300%**	**4.8300%**	**5.2300%**	**6.0000%**	**7.0000%**
Operating Costs	**0.4400%**	**3.5714%**	**1.5000%**	**0.5196%**	**0.4400%**	**0.2200%**	**0.1100%**	**0.5679%**	**0.5000%**
Advertising		**0.6985%**	**2.5168%**	**0.9354%**				**0.3669%**	**0.0000%**
Fee Income		**3.0000%**	**1.5000%**						
FDIC Premium		**0.2800%**	**0.2800%**	**0.2800%**	**0.2800%**	**0.2800%**	**0.2800%**	**0.2800%**	**0.2800%**
All-in Costs	**4.6700%**	**7.5499%**	**5.7968%**	**6.7349%**	**4.9500%**	**5.3300%**	**5.6200%**	**7.2147%**	**7.7800%**
Reserve Requirement		**10.0000%**	**10.0000%**	**0.0000%**	**0.0000%**	**0.0000%**	**0.0000%**	**0.0000%**	**0.0000%**
Average Cost of Funds	**4.6700%**	**7.5575%**	**5.8026%**	**6.7349%**	**4.9500%**	**5.3300%**	**5.6200%**	**7.2147%**	**7.7800%**

TABLE 3
INSTALLMENT LOANS EXAMPLE

Contract Rate	Volume of New Loans in Quarter 4	Annual Interest Revenue at Contract Rate	Change in Interest Revenue	Change in Loan Volume	Marginal Explicit Interest Revenue	Marginal Net Return	1% increase costs
9	55,840.78	5025.67					
			265.6255	7759.52	3.42322	0.444839	1.91403
10	48,081.26	4760.045					
			1476.03	18226.58	8.098228	5.119846	
11	29,854.68	3284.015					
			965.2812	10531.9	9.165309	6.186928	
12	19,322.78	2318.734					

PROBANKER COMPETITION: WEEKS 9 – 11

Students are typically quite eager to begin the competitive part of the game. Each group acts as its bank's Executive Committee. During the competitive game, the Executive Committee will adopt policies/strategies then evaluate the economic consequences of these decisions. These decisions must be input in a timely manner as directed and given another EXCEL spreadsheet for guidance (see Tables 4 and 5). The Executive Committee will keep written minutes by adopting the same format as used by the Federal Open Market Committee (see Table 6).

TABLE 4
INPUT DEADLINES

Thursday, March 6 (Noon)	**Q1 inputs due (Competitive)**
Tuesday, March 11 (Noon)	**Q2 inputs due (Competitive)**
Thursday, March 13 (Noon)	**Q3 inputs due (Competitive)**
Thursday, March 27 (Noon)	**Q4 inputs due (Competitive)**

TABLE 5

THE DYNAMIC BOX…

	Fixed Rate Loans	Floating Loans	Installmen	Mortgages	Bonds	Negotiable	Retail CDs	Passbook Savings	IRA	Demand Deposits Retail	Demand Deposits	Reserve
0.25%												
Suggested New Rate	9.3448%	4.8521%	12.7201%	11.5588%			3.7958%	1.6809%	5.3267%			7411.5994
New Rate With Advertising			12.7226%	11.5602%			3.7827%	1.6562%	5.2267%			
Desired Advertising Rate			0.30%	0.20%			0.19%	0.24%	0.20%	-2.19%	1.38%	
Advertising Dollars			90.7666	10.1466			20.7142	20.5263	1.5949	-1378.861491	153.9938	
	1Q	2Q	3Q	4Q	5Q	6Q	7Q	8Q				Return on Equity
Rate Sensitive Asset Duration	0.0552	0.0881	0.1195	0.1154	0.0533	0.0627	0.0662	0.0702				-20.6130%
Rate Sensitive Liability Duration	0.0129	0.0276	0.0180	0.0240	0.0035	0.0038	0.0044	0.0046				

					Estimated Interest Rate Change	Change in Equity
LADGAP Buckets	1Q	0.0432	Buy CDs	64337.5455	0.0066	-101.3857018
	2Q	0.1054	Buy CDs	78574.7747	0.0047	-174.9810518
	3Q	0.2081	Buy CDs	103382.9304	0.0032	-239.0414238
	4Q	0.3010	Buy CDs	112164.0214	0.0025	-266.8995939
	5Q	0.3511	Buy CDs	104658.7486		
	6Q	0.4102	Buy CDs	101898.9087		
	7Q	0.4723	Buy CDs	100568.8969		
	8Q	0.5382	Buy CDs	114598.4099		

TABLE 6
EXERPTS FROM MINUTES

April 23, 2013
A meeting of the executive officers of Mega Bucks National Bank, Inc. was held in the offices of Mega Bucks National Bank, Inc. in Valdosta, Georgia, on Tuesday, April 23, 2013 at 2:00 PM.
PRESENT:
Student #1, President, Chief Executive Officer, Chief Risk Officer
Student #2, Chief Operating Officer, Chief Credit Officer
Student #3, Chief Financial Officer, Chief Compliance Officer
Economic Condition
The executive officers of Mega Bucks National Bank, Inc. (MBNB) met for the final time to discuss the bank's economic condition. The meeting brought to an end the executive officers' two year plan to increase MBNB's profitability. At the close of the previous quarter, the two year plan yielded mixed results. MBNB's profitability did rise, but the trend was inconsistent and management had difficulty providing shareholders with an acceptable return on equity. The previous quarter's financial statements and reports on the regional banking industry were provided by Ms. Van der Watt, the Chief Financial Officer.
Strategic Planning
The Chief Executive Officer, Mr. Foss, began the discussion of rate setting policy for the final quarter. The new policy proposed was a continuation of the previous quarter's rate setting policy. The new rates for loans will be targeted at the previous quarter's market average, and the new rates for deposits will be lowered slightly from the previous quarter to create room for advertising expenditures. The executive officers believed that the current trend in market rates would continue into the final quarter, producing only a small deviation from the new market average.
Voting for these Strategies: Student #1, Student #2, and Student #3
The meeting was adjourned at 3:30 PM on April 23, 2013

The minutes for Q1, Q2, Q3 and Q4 are included in the assessment of these three weeks of the course and as part of the course grade for each student. In addition, the entire class receives bonus points on the final exam if no bank goes bankrupt throughout the competitive process and the top three banks at the end of the game get bonus points for dominating the market.

PROBANKER COMPETITION: WEEKS 12 - 15

The competitive game continues for Q5 through Q8. In addition to the aforementioned written minutes, each bank must hold an Annual Shareholders meeting. The Executive Committee will be required to give an oral presentation to attending shareholders (other students in class).

The minutes for Q5, Q6, Q7 and Q8 and the oral presentation to shareholders are included in the assessment of final four weeks of the course and as part of the course grade for each student. In addition, the entire class receives bonus points on the final exam if no bank goes bankrupt throughout the competitive process and the top three banks at the end of the game get bonus points for dominating the market. After 8 quarters of simulation, the "Master of the Market" is crowned.

CONCLUSION

In 2013, AACSB International published its revised Standards recognizing the dynamic environments of both business schools and the business world. The catalyst of change includes advances in technology combined with millennials who have adapted as wireless, multi-tasking, multi-device savants. These students have developed amid a plethora of stimuli and expect the same from their business education environment. A stimulating experiential learning exercise is created that appeals to their millennial characteristics and prepares them professionally. Use of experiential learning via the innovative, in-the-cloud ProBanker Simulation engages students thirst for new technological experiences and their competitive natures. The application serves to develop and hone critical thinking, problem solving, teamwork, and communication skills as a senior transition to the real world and real work.

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