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INTEGRATING MULTIPLE DATA SOURCES TO STREAMLINE INTERNATIONAL BUSINESS HONOR SOCIETY CHAPTER MANAGEMENT

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The College of Business at NWI University serves more than 1,000 undergraduate students and 200 graduate students across a range of programs. All business major programs are accredited by the Association to Advance Collegiate Schools of Business, International (AACSB). Immediately after the initial accreditation in 2015, the college became eligible to establish a chapter of Beta Gamma Sigma (BGS), the International Business Honor Society, which has "recognized and honored top performing students from around the world in business schools accredited by AACSB since 1913". As time goes by, more and more students qualify to be invited to BGS.

Dr. Linda Davis, the chapter advisor, feels it is challenging to manage the chapter based on paper documents and Excel spreadsheets, especially during the tapping season. To streamline the management of the chapter, Linda decides to design and implement a database, so that multiple data sources can be integrated seamlessly for reporting and analysis. Advisors and student officers are assigned different roles in the database. Moreover, they also benefit significantly from using the database to promote BGS and enhance student engagement with BGS on campus and beyond. This case shows the students how to run an honor society chapter and improve chapter management by using a database. Analyzing real-world data collected each semester enriches students' knowledge and experience in business analytics and critical thinking.

INTRODUCTION

Dr. Linda Davis entered the classroom of a senior capstone class and announced, "I'm here to recognize ("tap") students who are being invited to join Beta Gamma Sigma (BGS) - the International Business Honor Society for students in programs accredited by AACSB International. The students being recognized today are in the top 10% of their class by GPA." Each student came forward as their names were called. Dr. David presented them with an invitation packet and congratulated them

on their outstanding academic performance. The class gave this group of BGS inductees a round of applause.

Dr. Linda Davis repeated the induction procedure in fifteen different classes in October 2017. At the end of the month after completing the last induction, she returned to her office and thought that there must be a better way to tap students.

BACKGROUND

NWI University[1] is a regional comprehensive university established in 1946, accredited by the Higher Learning Commission (HLC). The university serves more than 10,000 students, employs more than 1,300 faculty and staff, and offers more than 50 graduate and undergraduate degree programs on two campuses. Academic programs are offered within five colleges.

The College of Business (COB) at NWI University was accredited initially in 2015 from the Association to Advance Collegiate Schools of Business (AACSB) International, which fewer than five percent of business colleges worldwide have achieved. One benefit of this accreditation was to be eligible to establish a Collegiate Chapter of Beta Gamma Sigma (BGS), the International Business Honor Society, which has been "recognized and honored top performing students from around the world in business schools accredited by AACSB since 1913".

The College of Business at NWI University is organized into two departments and one school and serves more than 1,300 undergraduate students and 200 graduate students across a range of programs. All business major programs are accredited by the Association to Advance Collegiate Schools of Business, International (AACSB). Immediately after the initial accreditation in 2015, the college became eligible to establish a Collegiate Chapter of Beta Gamma Sigma (BGS), the International Business Honor Society. The Mission of the International Honor Society Beta Gamma Sigma is "to encourage and honor academic achievement in the study of business, to cultivate and celebrate leadership and professional excellence, to advance the values of the Society, and to serve its lifelong members".

Being a BGS member is not only an honor, but also helps students gain professional and educational benefits, such as internship and scholarship opportunities. To facilitate the initial establishment of BGS' Collegiate Chapter, Associate Dean Miller was appointed to be the founding faculty advisor in 2015. He collaborated with administrative staff members to start and run the chapter successfully. However, after two years he was promoted to a new position and was no longer available to help BGS. Accordingly, the Dean appointed Dr. Linda Davis as the

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[1] The real university name is disguised.

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new faculty advisor, a tenured faculty member with 4/3 course teaching load and no administrative authority. During the transition training, Linda was able to gain access to the BGS portal, learn the workflow, and obtain the historical data.

Typical tasks for the chapter advisor, Dr. Linda Davis, include managing membership, tapping eligible students, advising student officers, arranging the annual ceremony, etc. In order to complete these tasks, she analyzed multi-source data and worked closely with the leadership team and staff members. As time goes by, more and more students qualify to be invited to BGS. The chapter advisor feels it is challenging to manage the chapter based on paper documents and Excel spreadsheets, especially during the tapping season. To streamline the management of the chapter, Linda decides to design and implement a database so that multiple data sources can be integrated seamlessly for reporting and analysis. Advisors and student officers are assigned different roles in the database. Moreover, they also benefit significantly from using the database to promote BGS and enhance student engagement with BGS on campus and beyond.

MANAGING THE BGS CHAPTER
The College of Business hosts a tapping ceremony in class every semester and an annual induction ceremony for new BGS members in the Spring semester. After the second week of the Fall 2017 semester, Dr. Linda Davis was under stress, because she had to finish tapping the students that were eligible for joining Beta Gamma Sigma (BGS), a well-known international business honor society, within three weeks. As a faculty member, Linda did not have the permission to look up the students' academic records, so she had to stop by the data manager Emily's office on Monday morning of week 3 and ask, "Would you please send me the list of students who are qualified for BGS this semester?". Emily answered, "How soon do you want it? I'm quite busy preparing the assurance of learning reports for the Dean. I don't have enough time to do it until this Friday. Sorry!" "Friday is fine. Thank you", Linda said.

On Monday morning of week 4, Linda received an email from Emily with the list of eligible undergraduate students. Emily needed more time for the list of graduate students because the MBA director was confirming the students' eligibility manually.

Two days later, Linda received the list of graduate students and started to build a new member list in Excel. One critical step was that Linda compared the student list provided by Emily with the existing BGS member list, which could be downloaded from the BGS chapter portal. The students that showed up in both lists had to be removed from the new member list, as they had already been invited in previous semesters. After data cleansing, there were 72 students in the final new

member list. Once Linda had a clean version of the new member list, she uploaded it to the BGS chapter portal and sent an email titled "It is Beta Gamma Sigma (BGS) Tapping Season!" (shown in Exhibit A below) on Monday morning of week 5 to all students in the list. In the email she introduced BGS, encouraged student participation, and announced the tapping plan. She also asked the secretary Alice to print the formal individualized invitation letters and obtain the Dean's signature.

EXHIBIT A:
Invitation Email

It's Beta Gamma Sigma Tapping Season!

Dear Students,

Beta Gamma Sigma is an international business honor society and we have the privilege of having a chapter on campus. You will see professors in their BGS regalia coming to classrooms to "TAP" the smartest college of business students. Tapping will begin this week and continue throughout the upcoming week. Invitations are presented to undergraduate juniors and seniors who have already completed half of their program of study and who are ranked in the upper 10% of their class along with graduate students who are ranked in the upper 20%.

Congratulations to those of you who will be "tapped" in the upcoming weeks. After accepting your invitation, you will receive an email from BGSHonors@betagammasigma.org which will include more information along with a link to accept your membership.

Warmest regards,

Dr. Linda Davis
Faculty Advisor of BGS NWI University Chapter

At the same time, Linda started to strategically plan the tapping, so that she did not need to visit too many classes to reach all invitees. Since Linda could not access the students' academic records, she brought the list to Emma, one of the academic advisors at the College, and asked, "Would you please let me know which courses these students are taking?". Emma input each student manually in the advising system to get his/her class schedule, which took her two days before reporting back. Linda pulled the reports together in Excel and used simple functions to identify the minimum number of class visits. Finally, Linda successfully tapped most students by visiting more than 20 classrooms. During each in-class ceremony, she

introduced BGS, congratulated the invitees and gave them the invitation materials, including the brochure provided by BGS and the invitation letter from the Dean.

After tapping, Linda notified all invitees who were absent in class to pick up their invitation materials or to request mailing from Alice. Linda also kept track of how many students had accepted the invitation and paid the membership fee to BGS throughout the rest of the Fall semester.

At the beginning of the Spring 2018 semester, Linda repeated the same process for tapping the eligible students. Since the annual induction ceremony was scheduled on the last Tuesday of April, she sent bi-weekly reminders until the end of March to the invitees who had not accepted the invitation. Two weeks before the ceremony, BGS sent out the certificates that had to be signed by the Dean and Linda.

During the ceremony, the regional BGS officer delivered the opening remarks to introduce BGS and local Alumni Chapter, the Chancellor congratulated the students and their families, and then select COB faculty members took turns to lead the ceremony following the ritual. The new BGS members were awarded with a certificate, honor cord and pin. Finally, an established BGS member who had attended the global leadership summit shared her experience of being engaged in BGS.

CHALLENGES

By the end of the Spring 2018 semester, Linda realized that it was challenging and time-consuming to run the chapter with her busy teaching schedule. What could she do to streamline the management of the chapter, particularly to facilitate the tapping process and membership management?

After knowing the difficulty that Linda was facing, the IT specialist Kevin at the COB suggested that data from the following three sources should be integrated in a database to identify eligible invitees and plan in-class tapping schedules.

- student academic record from Emily shown in Table 1
- student class schedule in current semester from Emma shown in Table 2
- existing member record from BGS chapter management system shown in Table 3

TABLE 1:

Sample of Student Academic Record

MAJOR	ID	LAST_NAME	FIRST_NAME	PHONE_NUM	STUDENT_CLASSIFICATION_DESC	email_addres_preferred	OVERRALL_GPA
MGMT	347180xxx	SMITH	Sophia	9121813xxx	Senior: 105+ hours	SMITH@NWI.edu	3.76
BNO	830786xxx	JONES	Emma	9127108xxx	Senior: 105+ hours	JONES@NWI.edu	3.78
BNO	804758xxx	BROWN	Olivia	9125084xxx	Senior: 105+ hours	BROWN@NWI.edu	3.81
ACCT	896682xxx	JOHNSON	Ava	9128085xxx	Senior: 105+ hours	JOHNSON@NWI.edu	3.85
X033	186948xxx	WILLIAMS	Mia	9121898xxx	Junior: 60 - 74 hours	WILLIAMS@NWI.edu	3.8
BNO	405432xxx	MILLER	Isabella	9125854xxx	Senior: 105+ hours	MILLER@NWI.edu	4
MRKT	771995xxx	TAYLOR	Riley	9127841xxx	Senior: 90 - 104 hours	TAYLOR@NWI.edu	3.88
XBUA	189041xxx	WILSON	Aria	9126743xxx	Senior: 105+ hours	WILSON@NWI.edu	3.95
BNO	524338xxx	DAVIS	Zoe	9129516xxx	Senior: 90 - 104 hours	DAVIS@NWI.edu	3.76

TABLE 2:

Sample of One Student's Class Schedule

Acad Period	Course	Title	CRN	Section Nbr	Sched Type	Course Credits	Classroom	Instructor	Meeting Time
Fall 2018	ACCT 40200	Financial Statement Analysis	1595	3	Lecture	3	CLO-101	White, A.	T & R 09:00AM-10:15AM
Fall 2018	BA 42000	Decision Analytics	1523	2	Laboratory	0	Lab-203	Moore, B.	W 06:30PM-10:20PM
Fall 2018	BA 42000	Decision Analytics	1523	1	Lecture	3	Lab-203	Moore, B.	W 06:30PM-10:20PM
Fall 2018	IB 38000	International Business	1139	3	Distance Learning	3	CLO-201	Hunt, C.	T & R 11:00AM-12:15PM
Fall 2018	FI 44900	Intl Financial Mgmt	1349	1	Lecture	3	CLO-105	Bell, D.	T & R 01:00PM-02:15PM
Fall 2018	IS 48600	Project Management	1223	2	Laboratory	0	Lab-201	Cook, E.	T 06:30PM-10:20PM
Fall 2018	IS 48600	Project Manageme	1223	1	Lecture	3	Lab-201	Cook, E.	T 06:30PM-10:20PM

TABLE 3:

First Name	Last Name	Email	Phone	Name On Certificate	Induction Type	Induction Year	Ceremony Date	Chapter
Abigail	PARK	PARK@NWI.edu	9128050xxx	Abigail PARK	Junior	2017	3/21/2017	NWI University
Aaliyah	MYERS	MYERS@NWI.edu	9123348xxx	Aaliyah MYERS	Junior	2017	3/21/2017	NWI University
Avery	RYAN	RYAN@NWI.edu	9129958xxx	Avery RYAN	Faculty	2017	3/21/2017	NWI University
Evelyn	FREEMAN	FREEMAN@NWI.edu	9127661xxx	Evelyn FREEMAN	Junior	2017	3/21/2017	NWI University
Kaylee	PIERCE	PIERCE@NWI.edu	9126877xxx	Kaylee PIERCE	Senior	2017	3/21/2017	NWI University
Ella	FELLOWS	FELLOWS@NWI.edu	9121840xxx	Ella FELLOWS	Masters	2017	3/21/2017	NWI University
Ellie	DOUGLAS	DOUGLAS@NWI.edu	9128771xxx	Ellie DOUGLAS	Faculty	2017	3/21/2017	NWI University
Scarlett	TUCKER	TUCKER@NWI.edu	9120612xxx	Scarlett TUCKER	Faculty	2017	3/21/2017	NWI University
Arianna	DIXON	DIXON@NWI.edu	9123529xxx	Arianna DIXON	Masters	2017	3/21/2017	NWI University