

# **AIS Survey: Student Needs**

# William X Graves<sup>1</sup>

<sup>1</sup>Associate Professor, Bemidji State University, USA

## Abstract

Students enrolled in the Accounting Information Systems class at our institution complete a manual accounting process case and a case introducing them to the Quick Books PC based software solution. This study was intended to assess the accounting information systems that our graduates are actually using and being exposed to when leaving BSU. This will help determine, among other things, what software we should be exposing our students to when enrolled in our institution. In addition, feedback from employers and students suggest that our graduates need higher end Microsoft Excel skills. This survey was also intended to determine exactly what functionality our students should be exposed to during their college career.

Keywords: U.S. Birth; U.S. Population; Structural time series model; State Space Form; Kalman filter

# **INTRODUCTION**

Students receive a semester long exposure to manual and computerized accounting information systems during their time at our institution. They also are tasked to your MicrosoftExcel during most of their course work. The question is – are we exposing them to the right options.

# LITERATURE REVIEW

The purpose of this literature review is to provide an overview of software tools used in Accounting Information Systems (AIS) in college classrooms. Etnyre et al. (2015) explains how AIS instructors can use software tools to demonstrate how control requirements are implemented within information systems, and the advantages and disadvantages of the several software packages included in their curriculum. Lee et al. (2018) found that Excel is the most frequently utilized software tool, the most important software tool for new hires, and that Excel should be emphasized in university accounting programs. Neely et al. (2015) acknowledges that some educators advocate a "skills orientation" that focuses on the use of actual software used by professional accountants such as QuickBooks or auditing-focused tools such as Accounting Control Language or IDEA and/or intermediate level skills applying Microsoft Excel and Access tools, while others still emphasize control and governance concepts and/or advanced technology experiences such as Extensible Business Reporting Language (XBRL), SAP, and business intelligence/data analytics.

## METHODOLOGY

A human subjects approval was requested from our institutions IRB Committee and was received before any surveys were conducted. The survey appears in Appendix A. All graduates of the Bemidji State University Accounting program – online and traditional – for the past five years (2015 thru 2019) were identified. Student workers assisted in composing the survey in Qualtrics and distributing it to the student data set via email.

The results were analyzed and be made available to participants, faculty and other interested parties.

Informed Consent: The following statement appeared at the beginning of the online survey:

You are invited to participate in a study of accounting information systems. I hope to learn which systems recent graduates of BSU are using and being exposed to after leaving our institution. You were selected as a possible participant in this study because you graduated with a degree in accounting from BSU in the last five years.

# ANALYSIS

Students who graduated in the last five years were surveyed. Reponses by year graduated wereas follows: Graduates were asked about the accounting information systems software they actually useand how intensely they have mastered the software.

- 1. I have worked with the QuickBooks software PC version.
- 2. I have worked with the QuickBooks software online version.



Graduates were asked about the accounting information systems software they actually use and how intensely they have mastered the software.

1. I have worked with the QuickBooks software PC version.



2. I have worked with the QuickBooks software online version.



## 3. I have worked with Freshbooks software.



4. I have worked with Oracle Financials software.



5. I have worked with Wave Software



## 6. I have worked with Xero software



7. I have worked with Safe software.



8. I have worked with Aptitude software.



9. Do you use any data analytics software in your current position?



10. I have worked with Tableau data analytics software.



11. I work with Microsoft Access



12. I work with Microsoft Excel.



- 13. I work with the following functions of Excel mark all that apply. Note survey participants could add comments on other advanced functions:
- a) VBA
- b) Power pivot
- c) Xlookup
- d) Index Match
- e) Power pivot
- f) Other



14. What Excel functions do you wish you had been exposed to during your studies at BSU. There were almost 35 individual responses to this survey question. The following chart is a summary of those responses.



DEMOGRAPHICS

# 15. CPA Exam Status



# 16. Company Size



## 17. Company Category



## 18. Comments

- a) Other AIS software packages used Great Plains, Advantage, ProSystem fx, CCH, HAB / Encompass, SAP, M3
- b) How BSU Prepared you for your current role:
  - i. I was not trained on our specific software, but my education helped me navigate and feel confident using the software
  - ii. More detail and experience with Microsoft Office would be helpful
  - iii. Overall, I am happy with the education I received at BSU. It undoubtably helped prepare me for the real world.
  - iv. The AIS course at BSU helped immensely while building a new infrastructure for my employer.
  - v. Focus on working in Microsoft Excel

# Conclusions

- QuickBooks PC software is still the most frequently used system by graduates continue using a QB PC case study in AIS course
- QuickBooks online is much more prominent than in our last survey add a project to provide exposure to students
- Excel used extensively by graduates increase exposure to Pivot tables, VLOOKUP and Macros
- The amount of material to expose students too continues to expand add Advanced AIS class
- Data analytics is growing in importance add to SLO and add problems / case studies to Advanced AIS class.

## Works Cited

Etnyre et al., (2015). Use of Software and Collaboration Tools to Integrate AIS and MIS Curricula. Retrieved from https://www.aisej.com/doi/pdf/10.3194/1935-8156-10.1.43

Lee et al., (2018) Beyond Excel: Software Tools and the Accounting Curriculum. AIS Educator Journal: 2018, Vol. 13, No. 1, pp. 44-61. Retrieved from https://doi.org/10.3194/1935-8156-13.1.44

Neely et al. (2015). Accounting Information Systems (AIS) Course Design: Current Practices and Future Trajectories. Retrieved from https://aisel.aisnet.org/cgi/viewcontent.cgi?article=3857&context=cais

## APPENDIX A

#### Accounting Information Systems Survey

#### Conducted by William Graves

**Subjects**: All graduates of the Bemidji State University Accounting program – online and traditional – for the past five years 2015 thru 2019.

**Purpose**: Assess the accounting information systems that our graduates are actually using and being exposed to when leaving BSU. This will help determine, among, other things what software we should be exposing our students to when enrolled in our institution. This same or similar study was conducted five years ago and this survey is intended to reassess those conclusions.

**Methodology**: After approval, email addresses would be obtained and this survey distributed via Survey Monkey. The results would be analyzed and be made available to participants, faculty and other interested parties.

Informed Consent: The following statement will appear at the beginning of the online survey:

You are invited to participate in a study of accounting information systems. I hope to learn which systems recent graduates of BSU are using and being exposed to after leaving our institution. You were selected as a possible participant in this study because you graduated with a degree in accounting from BSU in the last five years.

If you decide to participate, this survey will take approximately 10 to 15 minutes.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will not be disclosed.

Your decision whether or not to participate will not prejudice your future relationships with Bemidji State University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any questions feel free to contact me at the following email address - wgraves@bemidjistate.edu.

You are making a decision whether or not to participate. By continuing with this survey you are acknowledging your consent to participate in the survey. You may withdraw at any time without prejudice after starting the survey should you choose to discontinue participation in this study.

## Survey:

AGE Disclaimer – are you 18 or older – if NO you should not complete this survey

- Yes
- No

Question 1: Year you graduated

- 2019
- 2018
- 2017
- 2016
- 2015

Question 2: I have worked with the QuickBooks software PC version:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 3: I have worked with the QuickBooks software online version:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 4: I have worked with the Freshbooks software:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 5: I have worked with the Oracle Financials software:

• Yes – consider myself an expert

Yes – I have used it quite a bit

- Yes limited exposure
- No

Question 6: I have worked with the Wave software:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 7: I have worked with the Xero software:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 8: I have worked with the Sage software:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 9: I have worked with the Aptitude software:

- Yes consider myself an expert
- Yes I have used it quite a bit
- Yes limited exposure
- No

Question 10: Do you use any data analytics software in your current position?

- Yes
- No

Question 11: I have worked with the Tableau data analytics software:

- Yes consider myself an expert
- Yes I have used it quite a bit

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- Yes limited exposure
- No

Question 12: I work with Microsoft Access:

- Daily
- Weekly
- Monthly
- Rarely
- Never

Question 13: I work with Microsoft Excel:

- Daily
- Weekly
- Monthly
- Rarely
- Never

Question 14: I work with the following functions of Excel – mark all that apply:

- V Lookup
- Macros
- Pivot Tables
- Other advanced features \_

Question 15: What excel function(s) do you wish you had been exposed to during your studies at BSU?

Question 16: For purposes of demographic analysis, please answer the following questions

- I have passed the CPA exam
- I am working on passing the CPA exam
- I am not working on the CPA exam at this time
- I have no plans to sit for the CPA exam

Question 17: My employer has the following number of employees

- Over 10,000
- 1,000 to 10,000
- 100 to 1,000
- Under 100

Question 18: My company can be categorized as follows:

• Public Accounting firm

Governmental entity

- For profit company
- Nonprofit company

Question 19: Indicate what your primary role is currently:

- Staff Accountant
- Internal Auditor
- External Auditor
- AIS Expert
- Other \_

Question 20: Comments – feel free to provide us with any information regarding accounting information systems at your firm, especially if they were not listed above, or how BSU prepared you for your current role:



#### **Debriefing Statement:**

The purpose of this survey is to assess the accounting information systems that our graduates are actually using and being exposed to when leaving BSU. This will help determine, among, other things what software we should be exposing our students to when enrolled in our institution.

The results of this study will be posted on the College of Business Accounting Department website after October 31, 2020. If you have any questions or you would like more information about this study, please contact me, William Graves, via e-mail at wgraves@bemidjistate.edu. It is not expected that you will suffer any adverse effects from this study. If that should happen, please contact a mental health institution in your local area.

Thank you for participating in the study.