INFORMATION SYSTEMS EDUCATION JOURNAL

Special Issue: Teaching Cases

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The **Information Systems Education Journal** (ISEDJ) is a double-blind peer-reviewed academic journal published reviewed published by **ISCAP,** Information Systems and Computing Academic Professionals. The first year of publication was 2003.

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2016 AITP Education Special Interest Group (EDSIG) Board of Directors

INFORMATION SYSTEMS EDUCATION JOURNAL

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Teaching Cases

Advancing Student Productivity:
An Introduction to Evernote

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Abstract

This lab exercise exposes students to Evernote, which is a powerful productivity application that has gained significant purchase in professional work environments. In many academic settings the introductory computer applications course has a specific focus on standard productivity applications such as MS Word and MS Excel. While ensuring fluency in these applications is still relevant in today's business environment, we submit that colleagues should consider expanding the portfolio of applications we cover. The bulk of this paper is intended to expose colleagues to the capabilities of the application and help them prepare an in-class presentation and demonstration of Evernote. Appendix A contains a student lab exercise, which students can complete in or out of class. The instructor notes contain additional information and resources to help colleagues introduce this extraordinary tool to our students.

Keywords: Personal productivity, productivity applications, lab exercise, Evernote

1. INTRODUCTION

In the typical college computer applications class the technology emphasized is generally limited to standard productivity applications such as the MS Office Suite. The aim of this lab is to encourage colleagues to expand their approach to teaching productivity applications to include powerful tools that are widely used in the workplace such as Evernote. Evernote is a web-based notebook that combines the functionality of a traditional paper notebook and word processor with the collaboration and information sharing features of social media. It is considered one of the most valuable productivity oriented software tools available (Samuel 2015). Evernote also provides a structure for organizing content, which has been credited with replacing a physical filing cabinet and making it possible to become completely digital (Hyatt 2014).

Earlier in our discipline's history, when desktop computing diffused into organizations, and then into our homes, the need to educate our students on the effective use of applications such as Word and Excel was paramount (Davis et. al 1999). Naturally, this task fell to Computer Science and MIS Departments, which

implemented freshmen level courses intended to cultivate skills that would help them with future course work and make them competitive in the job market. While encouraging competency with the MS Office Suite still has merit in an introductory course, we submit this is no longer enough. The skills, tools, practices and challenges related to effectively participating in the modern workplace, not to mention our society, have changed substantially. As we know from the social psychologist Karl Weick, during times of great change we must not be afraid to drop our old tools and deploy technologies and techniques that are appropriate for the new context (Weick 1996).

The context in which today's knowledge workers operate is dynamic, multidimensional and demands new perspectives and tools (Friedman 2007). The modern context gives rise to the feeling that we all have a digital firehose aimed directly at us, which often leaves us feeling overwhelmed (Staff 2014). To combat this widespread problem it is argued that we need more effective mechanisms to capture, process, recall, and reflect on the information that is related to our professional and personal activities (Allen 2015). This issue is significant because it means that we must have the capability to capture relevant information through all digital and analog channels. This is further complicated by the widespread use of mobile and tablet platforms, which we expect to be conduits into our information repositories (Kelly 2013).

Another complicating factor the modern work context introduces is the project and group orientation of modern work (Schulte 2015). The new paradigm requires individuals to possess high levels of human capital and to collaborate with colleagues who are often geographically dispersed (Friedman and Mandelbaum 2011). Accordingly, it is incumbent upon us to help students cultivate their intellectual capabilities along with the ability to work in collaborative and dynamic settings. This requirement further illuminates a shortcoming in the typical approach to teaching productivity applications most academic environments promote.

When viewed from the perspective outlined above, we see that the narrow focus of teaching productivity applications such as Word and Excel, while important, do not go far enough. Over the last three years we have introduced Evernote with great success to MBA students for the purpose of addressing the aforementioned problems. The course, which is the required MIS course that is given during their second year of the program, focuses on traditional MIS topics that range from globalization to securing the IT infrastructure. However, a small proportion of the semester is spent introducing digital tools and workflows that can help executives be more productive. The success and positive feedback from participants in the course serve as the motivation for this paper.

In the sections that follow we provide an overview of Evernote and some of its capabilities. While a full discussion of all of the functions and capabilities are beyond the scope of this paper, we introduce many of the features our students can put to work in a lab exercise that is outlined in Appendix A. The remainder of the paper is intended to introduce colleagues to this tool and provide information and resources that will allow them to prepare and demonstrate the technology to students who can then complete the lab exercise in or out of class.

2. Why Evernote?

Why choose Evernote as a productivity tool in an MIS course? Evernote is one of the most prevalent software tools used for storing and organizing information. Even its free version provides a multitude of features, and it has almost limitless creative applications spanning a variety of environments. Evernote can store and organize practically any type of information in diverse formats. This information is stored on a remote server so it is available anywhere with an internet connection and is accessible on multiple mobile devices. Evernote is one of the most popular free software tools available with a user base of 27 million in the U.S. and Canada, 31 million in Europe, Middle East, and Africa, 8 million in Latin America, and 1 million in China (Smith 2015). Evernote has countless applications to improve productivity for knowledge workers including instructors, students, and business professionals (Kelly 2013). The discussion below provides a few examples of Evernote use starting with general applications then narrowing the scope to its application in education and in particular a focus on its relevance for MIS courses.

Evernote Uses
Perusing Web articles and postings one can find many examples of Evernote applications for personal, professional, and educational use. There are many ways Evernote can be used to manage and organize business and personal life. Business contacts, customer accounts, to-do lists, brainstorming activities

and professional documents are a few of the many items business professionals may keep in Evernote. Personal applications may include keeping track of food and recipes, organizing photos, shopping lists, receipts, and monitoring fitness and health goals. In the classroom both students and teachers will find ways to put the efficiencies of Evernote to good use. Students may organize notes, scan or take pictures of paper handouts, organize schedules, task lists, contacts, and capture photo images of class discussion notes and diagrams drawn on whiteboards. Instructors may use Evernote to organize course content and communicate with students, voice record a discussion or lecture and make it available on a note in a shared notebook, and provide voice and written feedback to students. One example is Michael Cruz who shared a notebook in Evernote with all of his students to communicate and organize course material for his entrepreneurship class at San Jose State University. To help make this example more tangible, Michael has made this notebook public and available to view at the following link. https://www.evernote.com/pub/synergix/bus18 1#st=p&n=3f873454-d365-42eb-acab-b9c48efb2a8e .

Relevance for the Introduction to MIS Course:

Evernote provides a tangible and hands-on application for key topics typically covered in introductory MIS classes. For example, an instructor may want to pair the Evernote lab with other topics such as managing information overload (knowledge management) and cloud-based computing. With cloud-based computing information is stored in an off-site location and is accessible through an internet connection making information accessibility independent of physical location. Evernote is cloud-based and designed to run as a standalone application on a desktop or laptop as well as an app for multiple mobile devices including iOS, Android, Blackberry, and Windows phone. This makes Evernote a logical lead-in to class discussions on cloud-based computing concepts, advantages, disadvantages, and practical applications. With this lab students can experience firsthand the ability to share synchronized information on their computers, smartphones, and determine for themselves the efficiencies granted by the technology.

Evernote for Project Management and Application Development Courses

Although the focus of this paper is geared toward the introductory MIS Course, Evernote is appropriate for a variety of other MIS related courses. Two classes where Evernote may be particularly advantageous are project management and application development. Introducing students to specific project management templates such as the one for managing project status reports at http://tabletproductive.com/new-evernote-project-status-report-template/ is an example of an Evernote use in project management classes. Evernote may also be used as a tool to facilitate project management in a more comprehensive manner, such as using it as an Agile virtual storyboard (Barato, 2014). Jose Barato's Agile storyboard can be found at: https://www.evernote.com/Home.action#n=102 68fc9-68a7-45dc-93ba-eb43614252a2&ses=4&sh=2&sds=5&. To access this storyboard it will be necessary to login when prompted. Enter **pmpeople** for both the username and password, if the software prompts you to confirm Jose's email go ahead and confirm the email provided and proceed to Jose's example You may first need to logout of your Evernote account before logging in to Jose's pmpeople account.

Although the lab provided in this paper was designed with the introduction to MIS course in mind, instructors are encouraged to use this lab activity as a springboard for more creative applications in other classes. The aforementioned Project Management and Application Development examples only scratch the surface of Evernote's potential to facilitate learning in MIS related courses.

3. Description of Specific Evernote Features for Student Lab Exercise in Appendix A

Although there are a plethora of innovative ways to integrate Evernote into a college course, we will begin with a basic exercise for students to demonstrate the main features of Evernote to be used for managing a research project. The next section details the capabilities that will be required to complete the lab and is intended to provide the foundation so a colleague can deliver a demonstration of the application's capabilities to a class. The student lab exercise, which can be found in Appendix A, can be completed in or out of class following the demonstration.

Writing with Evernote

Evernote employs the metaphor of analog notes and notebooks. Just like the foundation of a standard notebook is an individual note, the

same is true of Evernote. However, unlike a traditional analog notebook, Evernote makes it easy to capture different forms of content including words, audio and images into a powerful digital organizational system. Writing in Evernote is as simple as using a word processor and it possesses many of the same features found in mature word processing applications. The following short video provides an overview of writing in Evernote: https://www.youtube.com/watch?v=CvsnMZz1oQc

Capturing Audio and Images in Evernote
The types of information we encounter and want to capture far exceed elements that can be captured with words alone. Evernote provides the ability to digitally capture audio and images directly into an Evernote Note. For example, one of the authors requires a 15 minute oral final exam where the students are asked to discuss two to three major themes from the course. For each exam an Evernote Note is created that contains an audio Note of each student's exam. In addition to creating an audio Note the instructor types feedback for the student that is later passed along through the university's learning management system. In addition to audio Notes, one can capture images using a smartphone that are then placed immediately into an Evernote Note. Students are encouraged to capture complex formulas that are used in statistics and other required math courses. The following short video provides an overview of capturing audio in Evernote: https://www.youtube.com/watch?v=Tnx-i_VsLjw

In addition to capturing audio and image files in Evernote it is also possible to capture almost all file types in the application such as PDFs, MS Word and Excel file types.

The following short video provides an overview of capturing different file types in Evernote: https://www.youtube.com/watch?v=a_nYw0tclsw&index=5&list=PL4I5cq2DfrSpDiJChWD1oEDvc2aZflqbB

Create Checklist of Activities in Evernote
Checklists can help students stay focused and on task for getting academic tasks accomplished. With checklists in Evernote students have the ability to organize what they need to accomplish conveniently within the same tool they use to gather and organize their information. Checklists may be used to organize tasks to complete an assignment. Checking off each task can be a reward in and of itself and provide a sense of motivation to work on the next item.

Another use of checklists is with assignments that require multiple deliverables. A checklist can be used to insure that all required deliverables are completed and properly submitted. Evernote provides a simple 5 step method for creating checklists, which is illustrated in the following video: https://www.youtube.com/watch?v=7-S0WIVtp3Y

Capturing Web Content with the Evernote Web Clipper
Web Clipper is an add-in utility that enables students to take a snapshot of part or all of any webpage. This utility works through the web browser and allows one to grab web content from a site and then save the clips to Evernote. Examples may include clipping an article, the entire page, bookmarking, or capturing a specific screenshot. This feature also works with YouTube and Gmail. The Web Clipper extension is especially useful for collecting information in research projects because it makes web page information readily accessible at a later time from any mobile device, desktop, or laptop whether or not the Web is available. It also allows the web page content to be saved at the point in time of capture, so information is retained regardless of whether the page is removed or the content changes at a later time. If, on the other hand, one is interested in going back to the site and keeping up with its content as it changes then bookmarking the page or use a bookmarking tool such as delicious.com may be the best alternative.

The following video provides a demonstration of using Web Clipper https://www.youtube.com/watch?v=KfTcnuaw6Qg&list=PL4I5cq2DfrSpDiJChWD1oEDvc2aZflqbB&index=4

Creating Notebooks in Evernote
As you can see, it is easy to capture large amounts of information into Evernote. However, we need a mechanism to begin the process of bringing order to the system and that is where the concept of Evernote Notebooks comes in. Just like in the analog world where notes are contained in a notebook that same is true in the Evernote application. Evernote Notes, regardless of content type, can be placed in a notebook. For example, a student using Evernote can create a wide array of Notes for your course including the notes taken during a typical lecture, Evernote Notes that contain files such as the course syllabus in PDF to Notes that contain the audio from the guest speakers that visited the class. Those different Notes can be placed in

an Evernote Notebook that is named for the course. Creating Notebooks is illustrated in the following video: https://www.youtube.com/watch?v=tAq0lfFx6M8

Organizing with Stacks
Similar to the concept of Evernote Notebooks, Stacks allow us to introduce even more organization. Again, just like in the analog world where we can have notebooks focused on various topics that we can then stack, the same is true in Evernote. For example, in the previous section we saw how a student in your course can capture different types of information that is then placed in an Evernote Notebook named for your course. The student could also do the same thing for all of the courses she is enrolled in for the semester. Accordingly, she can create Notebooks for each of her classes and then place all of the Evernote Notebooks into a stack named for the semester such as Fall 2016. Creating Evernote Stacks is illustrated in the following video: https://www.youtube.com/watch?v=jnXiJpgo0bE

Creating Tags in Evernote
Tags in Evernote facilitate the process of searching notes, reducing the waste of time and energy looking for information and ideas previously saved. Tags are keywords that describe a note. They provide an additional way to structure Evernote Notes that facilitate searching and identifying relationships across Notes, Notebooks, and Stacks. It is recommended that voice memos be tagged at the time of their capture because audio files that store voice memos cannot be directly searched by Evernote (Samuel, 2015). Creating tags is illustrated in the following video: https://www.youtube.com/watch?v=UJGLwuSdB9c

Creating Shortcuts in Evernote
In addition to organizing one's Notes by tagging or placing them into Notebooks or Stacks, one can create a shortcut that is easily accessed from anywhere in Evernote. When managing our digital lives we tend to collect and curate large amounts of different types of data. However, when working on projects we focus on a small subset of all of the information we possess. Shortcuts in Evernote allow one to quickly access a single Note, a Notebook or Stack. In addition, you can also create a shortcut to a tag which will pull notes regardless of location. Creating shortcuts is illustrated in the following video:

https://www.youtube.com/watch?v=m25rEl47oVA

Modifying Images in Evernote Using Skitch
Sketchnoting is a feature that allows one to record creative ideas in nonlinear ways such as with drawings and annotations on graphic images. Sketchnoting is becoming more prevalent due to tablet computing (vanArnhem, 2013). Skitch is a free product that integrates seamlessly with Evernote to capture screen images, create drawings, and annotate images. The uses of Skitch primarily involve mobile devices and include features to annotate a PDF, annotate photos, mark up a web page, write on a map, and write or draw a note on a blank page.

The Evernote app for mobile devices will allow you to create an Evernote Note directly from the camera. Adding photo images to Evernote is demonstrated in the following video https://www.youtube.com/watch?v=hjKOxhXjMUA . Once the image is captured Skitch can be used to make annotations on the photo. This may be particularly beneficial for library research where pieces of information from books or journals can be captured by the camera, saved as a note, and then annotated through Skitch. Likewise, if students have written notes and would like to keep them in an electronic format they can take a picture of their paper and save it directly to Evernote. After photos have been captured then through Skitch additional annotations and drawings can be included in the image. The following video is a tutorial for using Skitch to annotate, rotate, and crop images. https://www.youtube.com/watch?v=VZEtRo9_kGs

Retrieving Information with Evernote Search
One can clearly see how Evernote can become the primary digital repository for much of our professional and personal lives. In early sections we highlighted the ability to create Evernote Notebooks and Stacks, which are useful organizing tools. However, as the number of Notebooks and Stacks increase, a more efficient discovery mechanism is required. The Evernote application possesses powerful search capabilities that allow one to easily drill down to the desired level. In addition, a key feature in Evernote related to image and document storage is its optical character recognition (OCR) capability. OCR makes the text content in images and documents searchable. For example, if a student were to add a PDF of the course syllabus to Evernote, the document would

become fully searchable. In addition, if a student captures images of hand-written paper notes or whiteboard notes, the contents of the paper notes or the whiteboard become fully searchable when captured with Evernote. The following video provides an overview of the search capabilities within Evernote: https://www.youtube.com/watch?v=yLuzye-mdr8

Mobile Devices and Evernote:
The aforementioned capabilities are enhanced through the integration with our mobile devices. The company has developed sophisticated applications for the iOS and Android platforms that allow for complete access to all of the information contained within one's Evernote repository. This is accomplished through automatically syncing new content to the mobile platform through the company's sync servers. Furthermore, the mobile applications have robust information retrieval capabilities and, of equal importance, possess powerful information capture mechanisms. The capabilities of the mobile applications are illustrated in the following video: https://www.youtube.com/watch?v=wQSZrL8vINY .

4. CONCLUSIONS

The need to learn and master applications that are related to effectively operating in organizations has informed our discipline since its earliest years. Historically, the focus has been on providing students with the knowledge to use standard tools such as MS Word and Excel, which have become ubiquitous. However, as technology continues to transform work practices we need to extend and refresh the tools and skills our students possess. This paper has endeavored to provide colleagues with an overview of the capabilities of this application and the resources to get up to speed on its use in a short period of time, so that one can give an effective presentation to students on its use. The lab exercise in Appendix A is intended to be distributed to students to complete in or out of class. The Teaching Notes contains suggestions based on our experience that will help colleagues prepare for the lab.

In addition to exposing colleagues to Evernote and streamlining the learning process, we hope to encourage discussion on the nature of the productivity tools we expose our students to and how we might revitalize this area of instruction. The aim of our discipline is to combine the best of what human beings are capable of with the

best of what technology can provide to improve organizations and society. We submit that when students begin to experiment and leverage technology that transforms their personal lives they can begin to imagine the power of technology, coupled with talented people, to transform organizations. This paper serves as the impetus for students to employ a powerful technology in their own lives with the hope they begin to see bigger possibilities for themselves and the organizations they will later lead.

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Appendix A: Student Evernote Lab Exercise

The goal of this lab is to focus on using the primary features of Evernote to manage a research project. The features are categorized into the functions they provide which include the capture of information, organizing and processing, sharing, and creating. This research lab is designed to take approximately 40 to 45 minutes of class time to learn how to sign up, install Evernote and practice using the features that will be needed to complete the project.

Setup Evernote, Clipper, and Skitch

1. Go to the Evernote.com website, create a free account, download the Evernote installation file, and install the software on your primary computer (desktop and/or laptop).

2. Launch Evernote on your main computer.

3. Open the browser you use most frequently and install Evernote web clipper from Evernote.com/webclipp.

4. Install Evernote on your mobile devices using the app store on your smartphone and/or tablet. Launch and sync Evernote on your mobile devices.

Assignment: Research Project

1. Create a new Notebook for your Research project.

2. Create a shortcut for your Notebook.

3. Add a note and create a To Do list (as a checklist) to plan the tasks you will need to accomplish for completing the research project.

4. Create a Checklist for the deliverables that need to be completed for the assignment.

5. Create a new Text note for writing up the draft of your paper.

6. In the process of gathering information for your research paper include the following:

    a. Write notes on paper and/or whiteboard. Take photo images of written paper notes and/or whiteboard notes. Additional photos may be taken from textbooks and journal articles if applicable.

    b. Use Skitch to annotate at least one of the images.

    c. Create tag(s) for your notes.

    d. Capture and tag voice note(s).

7. Search all your notes from one of your tags.

8. Create an outline of your paper and search through your notes to find support for your outline items. Include some of the following search techniques:

    a. Search through all notes using one of your tags.

9. Create an outline and write up the draft of your paper as you gather and organize your research data.

10. Include references.

11. Share the Notebook with your Professor.

12. Complete all the deliverables requested.