Meet John Gohsman, vice president for IT and chief information officer

BARBARA JOHNSTON

Gohsman

BY LENETTE VOTAVA, OFFICE OF INFORMATION TECHNOLOGIES

Although he earned a degree in business data processing, **John Gohsman** couldn't have understood at the time the impact information technology (IT) would have on his career.

"When I began my IT program at my university, we were still working with punch cards," says Gohsman. "We were actually nervous about the change to using a terminal. The response time was slow and we could do our work faster with the punch cards."

Then the industry moved from using large mainframe computers to minicomputers. Change continued to accelerate as the industry moved to client-server computing, then to web-based solutions and now to the cloud.

Those who have been in the IT industry for any length of time have had to adjust to technical change, Gohsman says. "IT is ubiquitous, and I think it is important that we are a key variable in any decision-making process."

With a long and distinguished career in information technology at major research universities, Gohsman joined Notre Dame's Office of Information Technologies as its leader in July 2018. "I feel blessed and humbled to be here at Notre Dame in this role, and plan to work hard to build on the solid foundation already in place," he says.

Most recently, Gohsman was the vice chancellor for information technology and chief information officer at Washington University in St. Louis. He created an IT governance structure to guide the university's IT investments, and created its first central IT organization. Gohsman also partnered with the largest research computing organization to establish the institution's first research infrastructure organization and services.

He spent 30 years in information technology at the University of Michigan. As an executive director for strategy, planning and solutions in IT services, he is credited with helping establish Michigan as an early user of academic and administrative analytics. He also led the innovative NextGen Michigan program, which implemented the university's first private and public cloud offerings and moved central IT to a services orientation.

Gohsman was an inaugural member of Michigan's Data Administration group in the early 1990s, which led the development of the university's strategic data plan and an enterprise data warehouse. Later, Gohsman managed Michigan's co-development effort with PeopleSoft for their student administration product and led the M-Pathways implementation for student administration and for human resources management systems. The project won the 1999 Computerworld Smithsonian Award for the use of computer technology in innovative ways.

He was attracted to Notre Dame because of its culture and its strong reputation in academics, research and information technology. "Looking forward, I want to build on the solid foundation, and continue the strong collaborative approach my predecessor, Ron Kraemer, established," he says. "As part of the accomplished and innovative OIT organization, I want to work toward furthering the mission of the University."

Raised in Vassar, Michigan, Gohsman earned his bachelor's degree in business data processing from Ferris State University. His areas of expertise include strategic planning; IT governance; program, project and change management; and administrative, academic and business intelligence systems.

Though Gohsman considers himself an introvert, he loves being on college campuses. "The diversity of the faculty and staff, combined with the breadth and depth of their expertise and eager students — it blends into an energy you won't find anywhere else," he says. He enjoys reading and playing golf. His wife, Mary, also has a background as an IT professional and works as the assistant director of special projects and operations for the Center for Research Computing.

Plans for IT at Notre Dame

- Enhance the IT governance process to ensure IT alignment with the strategic needs of the University, prioritize those needs and move to a multi-year project plan.

- Develop deeper relationships with Notre Dame faculty (directly and via the Center for Research Computing) and students, as well as regional and global partners.

- Continue to enhance OIT services by improving the definition of our services, clarifying expectations and ensuring there is a funding model in place to maintain and sustain the infrastructure as it grows.

- Continue to improve our cybersecurity environment to reduce risk.

- Continue to assess the infrastructure and look at ways to improve applications and data.

- Engage with peers in higher education.

- Invest in IT staff to maintain the skills necessary to understand changes in IT, and support the changing needs of the University.

ND Studios technology helps bring academic events to life

ND Studios' involvement in a collaboration between Notre Dame's Office of Digital Learning and the University of Michigan helped bring two unique academic events in support of the Listening to Puerto Rico teach-out **(listeningtopuertorico.org)**.

Using the Rex and Alice A. Martin Media Center, the ND Studios team assisted in the coordination, engineering, production and live-streaming of these events. The main goal in hosting these two live "teach-in" events was to continue the conversation on Puerto Rico by giving a platform to Notre Dame faculty and students who were impacted by Hurricane María.

The first event included a discussion with an expert panel made up of Notre Dame faculty members from Puerto Rico. It was conducted and recorded in the Eck Visitors Center, and streamed live on the University of Michigan Coursera site.

This use of the massive open online course (MOOC) platform Coursera for live-stream delivery was a first for Notre Dame Studios, requiring close coordination with the Office of Digital Learning staff and the University of Michigan.

At a reception after the event, ND Studios staff recorded participants' own stories of Puerto Rico as part of this phase of the course in the Martin Media Center Teaching Studio.

The second academic event was a panel discussion that featured Puerto Rican students — most of whom were in Puerto Rico at the time of the storm — and two Notre Dame faculty members. It was set up in the Martin Media Center in front of a live studio audience, as well as an interactive online audience with live chat functionality. The audience consisted of Notre Dame students as well as viewers from around the world.

The Notre Dame Studios team, in conjunction with campus partners, leveraged the world-class technology in the Rex and Alice A. Martin Media Center to be a force for good — serving the academic mission of the University.

PHOTO PROVIDED

ND Studios coordinated a live-streamed teach-out event.

Valuable IT news, tips and updates at your fingertips

Do you want to receive additional information about IT news, tips and service status updates?

The OIT has several resources available in different formats. Just choose the one that provides the information you want in the way you prefer to receive it.

- **OIT website** — Lists the major IT services for campus with their status on the home page. Green is good, yellow means the service is having issues and red means it is not available. **oit.nd.edu.**

- **Twitter** — Informative tweets about IT services are available **@OITatND.**

- **Facebook** — Information about IT services is available at **facebook.com/oithelpdesk.**

- **Text messaging and email status updates** — Choose to receive IT service status messages by email, text message or both. Go to **ndoit.bbcportal.com** to create your account.

- **IT MATTERS newsletter** — The weekly OIT newsletter that has tips, news, maintenance information, changes in existing IT services or new service announcements. **ntrda.me/ITmatters.**

Google apps update

New features in Gmail

Google has introduced a new look for the Gmail features you already use, and added new ways to organize your inbox, view upcoming events and take action on emails.

Here is an overview of how these new features can help:

- **Message organization:** To help organize your inbox, you can assign an action to each email without opening it. Just click on the box next to it and choose from: Archive, Delete, Mark as Unread, or Snooze.
- **Snooze feature:** Redirect an email from your inbox to your Snooze label (located on the left side of the screen) to a future date or time that's more convenient for you to address it or take action.
- **Quick email reply:** Smart Replies allows you to quickly reply to emails by clicking on the common phrases listed below the message you received.
- **Response reminders:** Old emails that you've not responded to will appear at the top of your inbox with a suggestion to reply or follow up.
- **Writing resource:** Smart Compose will anticipate what you want to write in an email and auto-complete your sentence.
- **Use other apps in Gmail:** While in Gmail, you can now use:
  - **Calendar** — View your daily schedule, edit events, create new events and check on upcoming events.
  - **Keep** — Create checklists and take notes.
  - **Tasks** — Add to-do's and deadlines.

For additional details on what's new in Gmail, go to **ntrda.me/ newlookgmail.**

Manage shared resources in Google Calendar

Did you know that Google Calendar can help effectively manage shared resources such as meeting areas, event space or departmental equipment?

Using Calendar provides easy access to those in your department who use these resources, and allows you to keep track of them as well. Users are able to:
- Schedule events in a foyer, great hall, lobby, atrium, etc.
- Schedule meetings in a conference room, enclave or other meeting space.
- Book equipment carts, bicycles, parking spots, video cameras, etc.

When requesting a resource calendar, you can choose to set up a shared or private calendar, and even request permission for resource use. Plus, when someone in booking an event, Calendar can automatically suggest rooms close to where the attendees are located.

Setting up the ability to schedule departmental meeting areas, event space and equipment in Google Calendar helps keep these resources available to those who need them. You can fill out a request form to set up a resource calendar for locations or equipment scheduling in Google at **ntrda.me/2zDezm0.**

Drive file stream reminder

Now that individual files have been moved from NetFile service to Google Drive, there is a handy Google app to improve file access.

Google Drive File Stream allows you to access your Drive files using Explorer (Windows) or Finder (Mac). Because you are streaming your Drive files directly from the cloud to your Mac or Windows machine, you are freeing up disk space and network bandwidth.

Plus, Drive files are stored in the cloud. Any changes you or your collaborators make are automatically updated, so you'll always have the latest version.

You can also make Drive files available for offline access. These offline files sync back to the cloud when you're online, so the latest version is available on all your devices.

For additional information and to access the instructional videos on how Drive File Stream works, go to **ntrda.me/drivefilestream.**

Team drives permission changes

For those who use Team Drives, Google has made some recent permission changes that may affect how files are shared.

The role of content manager has been added to the permissions list. In this role, a person can edit, reorganize and delete content, but cannot modify Team Drive membership.

The changes to existing permissions include: The default role for new members of a Team Drive is now the content manager role instead of full access.

The names of these roles have been changed:
- Full access is now known as manager

- Edit access is now known as contributor
- Comment access is now known as commenter
- View access is now known as viewer

The new content manager role and other permission changes are not available in older versions of the Drive mobile app. Be sure to install the latest update for the Google Team Drives mobile app via Google Play for Android devices or the App Store for iOS devices.

For details, go to **ntrda.me/ teamdrivesrole.**

Successful NetFile migration to **Google Drive**

All individual and departmental files stored in NetFile have been relocated to Google Drive, and access to the NetFile service has been removed.

Relocating files to Google Drive now offers faculty, staff and students some great benefits including unlimited storage, the ability to collaborate globally and reliable access on a multitude of devices.

Here are some interesting facts about the amount of data that was relocated:

Individual and departmental accounts
- 38,255 accounts
- Over 60 million files
- Over 55 TB of data

If your files were moved from NetFile to Google Drive, you may want to review any files that contained

links. Any time files are moved from one storage location to another, links may no longer work.

For instructions on identifying broken links within your documents and how to fix them, go to **ntrda. me/brokenlink.**

PHOTO PROVIDED

A digital camera reverses the image on the lightboard so images and text are easy to read on the video.

ND Studios installs lightboard technology to assist with academic recordings

BY TOM MARENTETTE, ND STUDIOS

Recording academic lectures or presentations can be done easily with the lightboard technology now available. The Office of Information Technologies (OIT) Learning Platforms and Notre Dame Studios groups collaborated to install a lightboard in the Rex and Alice A. Martin Media Center.

A lightboard is similar to a chalkboard or whiteboard, but is a large sheet of tempered glass in a structural frame illuminated with LED lights around the edge. It can be used to record video lectures for students or any other type of presentation.

A camera is pointed at one side of the lightboard, while the instructor writes on the other side with fluorescent markers. Special lighting helps the images glow to become highly visible.

Using a digital video camera, the image is reversed to produce a video with highly legible text or drawings. This video is often recorded in short sections for posting in Sakai or on websites or blogs, all enhancing the tools our instructors have to teach and engage our students. Notre

Dame faculty will often use this type of content for blended learning models, to integrate digital media into their instruction.

The lightboard is ready for scheduling, along with the professional guidance of the staff in ND Studios. To book the lightboard, submit an "ND Studios Request" at **scheduling.nd.edu.**

Look for future workshop opportunities to explore how you can leverage the technologies in the Rex and Alice A. Martin Media Center for your academic or administrative project. This is yet another way the teams in the OIT are assisting our campus colleagues in achieving their objectives to serve the mission of the University of Notre Dame.

VPN **upgrade** and two-step **login**

The Notre Dame VPN (virtual private network) service was upgraded last month. To access the VPN **(vpnaccess.nd.edu),** you must use the updated version of the Cisco AnyConnect (v4.6).

All University-managed machines have received the updated VPN software. If you use the Notre Dame VPN and have not yet updated your computer or mobile device to Cisco AnyConnect v4.6, you may download the software from the Software Downloads page on the OIT website at **oit.nd.edu.**

The VPN service has been added to the list of services that require two-step login. Therefore, you must log in with your Notre Dame credentials before you are able to connect to the VPN.

ServiceNow:
Your 24/7 Help Resource
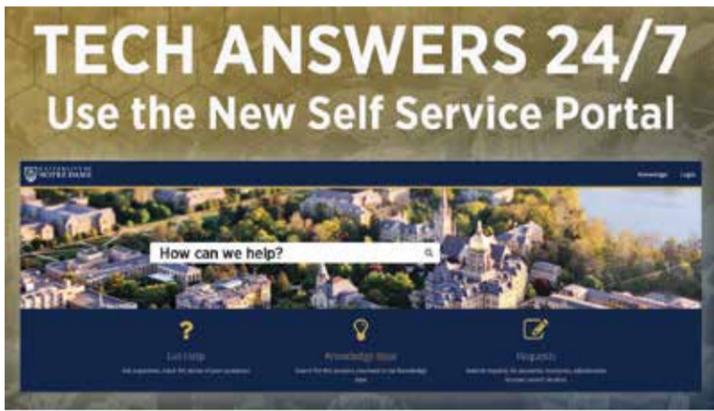
ServiceNow provides a self-service portal for faculty, staff and students to use for technology-related questions and issues.

It features a searchable **knowledge base** with informative articles and how-to instructions about virtually anything in Notre Dame's technology environment. If you can't find the solution in the knowledge base, you can submit an incident (**Get Help**) describing your question or problem. You can even **request** new or changes to your IT services. Plus, you can access it on your computer or other mobile device. To access full functionality, make sure you log in to the site by selecting the login link that appears in the top right corner of the screen, and entering your NetID and password.

The ServiceNow self-service portal is a great resource for technology help any time you need it, 24/7.

There are more than 1,300 articles available to you on a variety of IT topics — many specific to Notre Dame. It is the same information IT support staff use to assist anyone with a technology question. Most articles are based on questions to the OIT Help Desk from faculty, staff and students.

The Knowledge Base continues to evolve. Many IT support staff members across campus submit new articles as new issues are identified and solutions documented.

Access the knowledge base at **servicenow.nd.edu,** and enter the word or phrase you want information about in the search field. You'll begin to see topics popping up related to the information you entered.

For additional information on using ServiceNow and the Knowledge Base, visit **ntrda.me/knowledge.**

OIT Help Desk:
At your service

For questions about your computer, ND-supported software or IT service questions, the OIT Help Desk has the answers.

Conveniently located at 115 DeBartolo Hall, the OIT Help Desk representatives can help you with your questions by phone, email, self-service (see above) or chat. You can also take advantage of these convenient services there as well:

- **Computer repair:** When your computer is in need of repair, you can drop it off and pick it up at the OIT Help Desk, as well as the Hammes Hub. The in-house service center provides warranty and non-warranty repair work for many popular brands at reasonable rates.
- **Computer rental:** If your computer is being serviced or you are traveling internationally for University business, you can rent a computer at the OIT Help Desk. Since configurations vary, be prepared to list your hardware and software needs when you make your reservation.
- **AV equipment checkout:** Faculty, staff and students can checkout a variety of AV equipment — from video recorders and microphones to tripods and cameras. Loans are restricted for use in a classroom or a class project only.

For additional information, go to **oit.nd.edu/help-desk.**

OIT Help Desk
115 DeBartolo Hall
Phone: 574-631-8111
Self-Service: servicenow.nd.edu
Chat: help.nd.edu
Email: oithelp@nd.edu

Academic Year Hours
Monday-Thursday:
7:30 a.m.-8 p.m.
Friday: 7:30 a.m.-5 p.m.
Saturday: Closed
Sunday: 3-8 p.m.

The OIT Knowledge Base

The Knowledge Base continues to evolve. Most articles are based on questions to the OIT Help Desk from faculty, staff and students. Visit **servicenow.nd.edu.**

Interesting Knowledge Base Facts — In the last three months, the OIT has added 88 new articles, in a variety of categories or topics (see below).

NEW ARTICLES IN THE PUBLIC KNOWLEDGE BASE BY CATEGORY

Pie chart categories:
- Sakai 21%
- Auxiliary Systems 14%
- Email and Calendaring 12%
- Google Drive/Other Google Apps 9%
- Ed. Technology Consulting and Training 7%
- NetFile 6%
- Document Imaging and Management 3%
- Forms and Surveys 3%
- Network Access and VPN 3%
- Operating Systems 3%
- Security Policy and Compliance 3%
- Conferencing 2%
- Other 14%
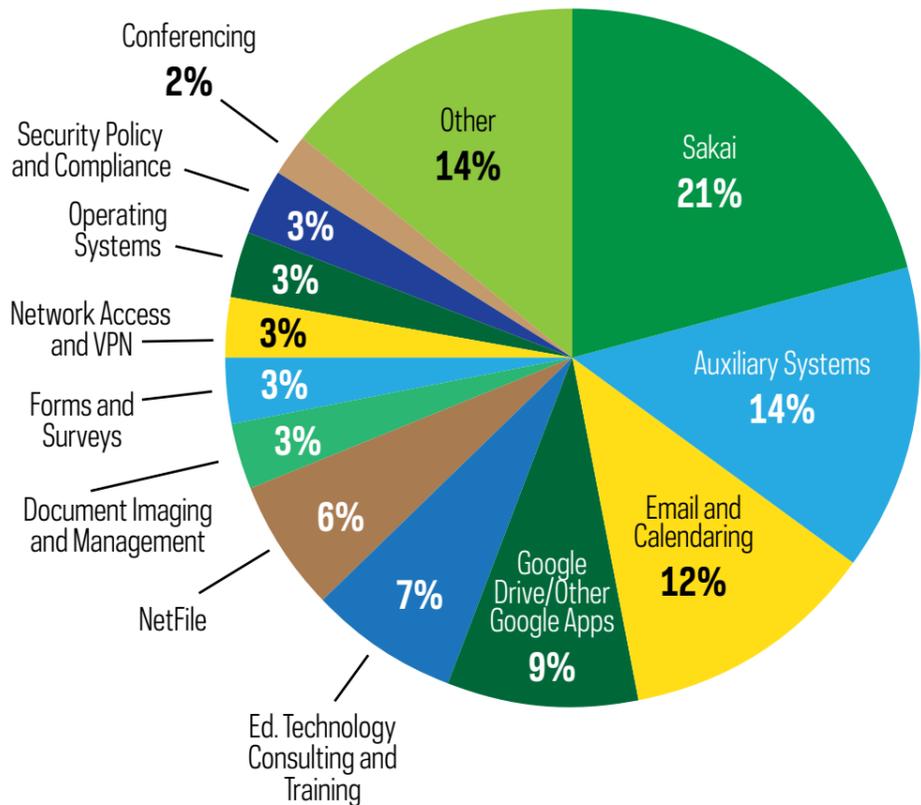
PUBLIC KNOWLEDGE BASE ARTICLES BY QUARTER LAST UPDATED

Pie chart:
- Oct.-Dec. 2017 5%
- This Quarter 48%
- April-June 23%
- Jan.-March 24%

The OIT is committed to keeping the information accurate and up-to-date. In the third quarter of this year, 48 percent of the articles were reviewed and updated!
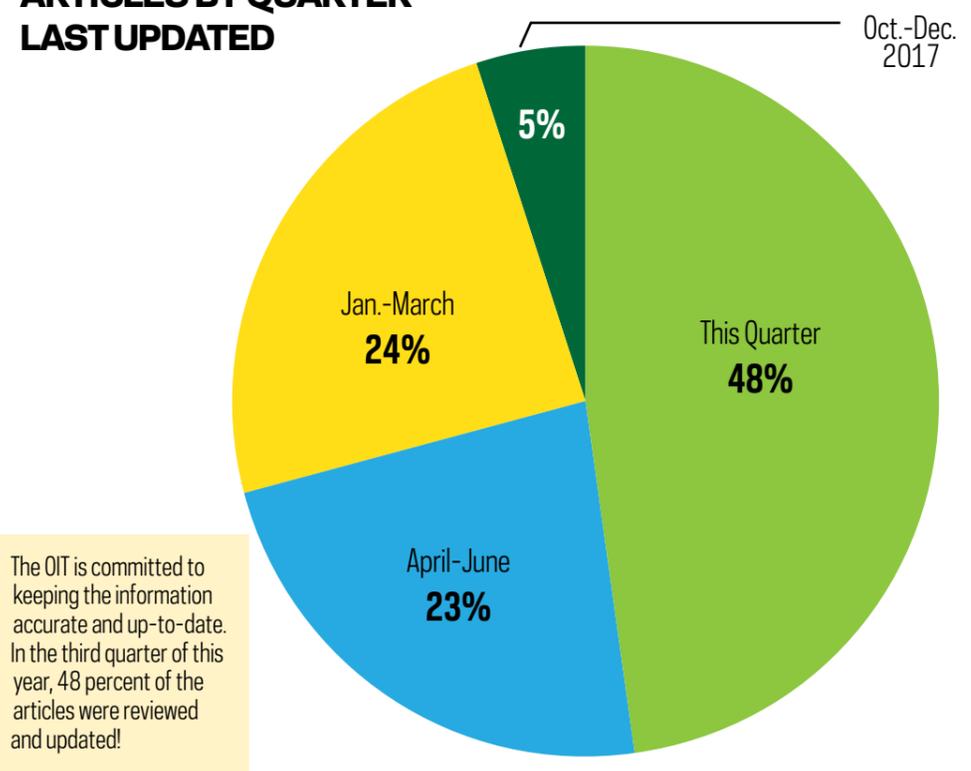
OIT hosted **learning opportunities**

The OIT offers faculty, staff and students the opportunity to learn something new through a variety of training options such as:

- **Hands-on workshops** covering many commonly used Google, Adobe and Microsoft products. Most workshops are free of charge.
- **Lunch & Learn sessions** provide a quick look at new products or tips on using common apps more efficiently. These brown bag sessions are held in LaFortune and run from noon to 12:50 p.m.
- **Taste of Technology 2019** (OIT's annual mini-conference) will held on campus on March 13 and 14, 2019. Whether you are novice or an expert, there's something valuable for everyone who uses technology.
- **Team training for your department** is also available. Choose an existing workshop, or custom training to meet specific needs can be developed.

For more information on these workshops, go to **oit.nd.edu/training-classes.** Register for classes at **endeavor.nd.edu.**

OIT Training Office
B004 IT Center
Phone: 574-631-7227
Email: training@nd.edu

Plugging in to Sakai:
Additions that make a difference

From the learning apps available on your cell phone to publisher sites with hyperlinked text and built-in quizzes, online educational tools are everywhere. As these apps and websites have matured, it's clear that they have a place alongside traditional homework as a way to reinforce learning outcomes for students.

Faculty are subject-matter experts who often have specific paths for students to follow as they learn. Sakai, Notre Dame's learning management system, offers dozens of ways to present concepts and create learning exercises.

But Sakai is not a one-size-fits-all. Instructors are also able to adopt focused educational apps and websites to engage students in dynamic new ways outside of Sakai.

Requiring multiple websites and apps can get cumbersome for instructors and students alike. Students must set up new accounts and passwords, as well as keep up with coursework deadlines and where the work is located. Instructors must track student involvement in multiple places and find ways to tie student results back to a single reporting method, such as an Excel spreadsheet on their laptop.

So how can educators have the best of both worlds?

One significant solution is to connect these third-party tools to Sakai via a secure plug-in. Once the connection to Sakai is created, students simply log in to Sakai and access the plugged-in website without creating a new account in another system. Additionally, if the other app is equipped to do so, this integration will bring the earned grades back into Sakai's Gradebook.

The grade transfer may not be available for every app, but more publishers and sites are working toward achieving this standard each semester. Otherwise, instructors are often able to simply download student grades from the third-party site and import them into Sakai's Gradebook. This workflow is made possible through the account provisions established when the two sites were originally linked together.

Holly Goodson, professor of chemistry and biochemistry, found an effective independent forum tool called Piazza. It allowed hundreds of students in her courses to ask and answer common questions without flooding her email.

When she first started using Piazza, it was a stand-alone app. A student had to create new accounts that didn't necessarily correlate to his/her ND account, and caused accounting problems for Holly and her TAs.

Arthur Lim, professor of mathematics, had the same experience once he found MapleTA — testing software for calculus placement exams. Outside student accounts and authentication needs caused headaches as he attempted to track grades in this system. "It was almost impossible to tell who was who," says Lim. "Even if I told them to put in their IDs, it was a nightmare."

Both applications were eventually plugged into Sakai. Student accounts were automatically created and tied to their Notre Dame accounts, which saved everyone a significant amount of time and work.

As Goodson describes, "Now it's just like anything else in Sakai. There's a link to the Gradebook, there's a link to the Resources and there's a link to Piazza. It's seamless."

For Lim, "The plug-in totally resolved the registration issue, and now I have the perfect tool to write the questions I want."

By working with the Sakai team to help them merge a valuable resource tool in Sakai, these instructors and others are finding more effective teaching tools. The results are greater learning outcomes, and a positive difference for them and their students.

If you have an app or website that you would like to add to Sakai, please contact the Sakai Team at **sakai_team-group@nd.edu** to get started.

Best practices for
password management

Another online account means another password. Most people cringe at the thought of creating yet another password. The right thing to do is to create a strong, unique password for each account. But not everyone does it.

LogMeIn, a password management company, showed that while 91 percent of people know that using the same password for multiple accounts is a bad idea, 59 percent do it anyway.

As reports of hacking events from high-profile companies and theft of consumer information continue to be in the news, it's even more important to practice good password management.

When developing passwords, here are some helpful tips:

- Passwords should be something you can remember.
- Passwords should be long; use passphrases such as beautyandthebeast, hortonhearsawho or aroundtheworldin80days.
- Passwords should not be reused.
- Passwords should be unique to you.

- Passwords alone are not safe; use two-step authentication.
- Have a password management plan. Be deliberate about how you use passwords. Make a plan and stick to it.

There are different password management tools you can use to help you keep track of your account passwords.

Password Safe: A free password management tool that is approved for use on campus. It has versions for Windows, Mac, iPhone and Android. Passwords are stored right in the app, and are not synced between devices.

1Password: Also approved for use on campus, but has a monthly fee. It has the ability to store passwords, credit card numbers and any other data you want to have in a secure place. It is stored in the cloud so the information is available on any device. It has versions for Windows, Mac, iPhone, Android and plug-ins for many browsers.

For more information, go to **ntrda.me/passwordmanager.**

A closer look at
privacy

BY KOLIN HODGSON, OIT

What is private to you? Do you trust social media apps with your private information? Which social media apps have your data?

According to Pew Research, 69 percent of adults use social media often. Activities include staying in touch with friends and family and reconnecting with old acquaintances. Younger people also use it for enhancing friendships and romantic relationships.

Social media has become a forum for civic and political activities, a source for scientific and health information or a source just for getting the news. People have trusted social media with personal relationships, medical information, political lives, and likes and dislikes. But even though people have shared this information in their social media accounts, it seems that nobody trusts social media companies when it comes to keeping personal information private.

Results from the Pew survey shows that less than 10 percent of those surveyed were confident that social media companies would protect their data. Actually, the companies don't. That's why organizations such as the Electronic Privacy Information Center (epic.org) and Center for Digital Democracy are busy filing suits against social media companies who disregard privacy rights.

What do social media apps do with the data? It's mostly used for advertising. In 2017, Facebook collected $40 billion in advertising revenue. But personal data is also sold to data broker companies such as Acxiom. Last year, Acxiom resold personal data for about $900 million.

Buyers use this personal data to market products to us. This may seem harmless for some, but it's not just about trying to sell you a soda or concert tickets. It's about selling you a political candidate — or even an idea that may be more beneficial to a business or organization than you. Others may use your private information as a tool to scare or bully you, or even extort money from you.

To help maintain privacy around personal data, first ask yourself, "What information about your life is not for sale?"

What do you consider private? Developing improved privacy habits with social media is a good first step. And remember: If you want your information kept private, don't put it on social media. Here are some tips to keep in mind when using social media:

- **Undershare** — It is not necessary to complete your profile on your social media account. Adding information such as your school, address and birth year doesn't make the experience better for you or your friends, so don't provide it.
- **Followers/following** — Know who is following you, and don't accept follow requests if you don't know the person. If you have followers you don't know, just block them.
- **Turn off location info** — There is no need for every app on your phone to know your location. That's just more of your life up for sale.
- **Tag feature** — Tagging can invade your privacy too. Turn on the feature that lets you review tagged posts before they can be posted. If a post makes you uncomfortable, don't approve it.
- **Review privacy settings** — Take a few minutes to review the privacy settings in your social media accounts. You can set them to meet your privacy standards.

Everyone has a different definition of privacy. Be wise about what you share on your social media accounts so personal information you want to keep private stays that way. For additional information, go to **ntrda.me/socialmediaprivacy.**

Wi-Fi improvements
on campus underway

Demand on the wireless network on campus has increased exponentially. In a given week, the ND wireless network supports between 100,000 and 250,000 unique mobile devices.

In response to both the upsurge in the use of mobile devices and the need to support growing academic and administrative initiatives, a six-year plan was developed to upgrade the ND wireless network.

The primary goal of this plan is to move from a coverage design to a capacity design. This way, the Wi-Fi service will remain consistent no matter where you are on campus or how many people are in your general area (does not include green spaces.)

In fall 2017, the OIT network engineer team completed Wi-Fi upgrade project in Notre Dame Stadium. This project included installing nearly 1,500 wireless access points in the bowl, concourse and surrounding buildings. During a football game, the number of unique Wi-Fi connections can be well over 25,000, while the total data use can be approximately six terabytes.

Currently, OIT network engineers are surveying each building on campus to assess the Wi-Fi coverage in every room of the building. Once the results have been reviewed, an upgrade plan will be developed.

The OIT network engineers will work with the building managers and contractors to minimize disruption during the workday. Once the upgrade is completed, analytics will help validate performance in each location and provide insight for optimizing the Wi-Fi experience.

Some of the buildings that have been recently upgraded include Crowley Hall of Music, Cavanaugh Hall, Pasquerilla East and Pasquerilla West. The wireless upgrades in the master plan are designed to accommodate the wireless needs of campus for the next five to seven years.