Teaming For Innovation

By: Donald Hopkins, Wright State University Member, Technology First Board of Directors

Often innovation is associated with large corporations, with large research organizations, or with universities doing “base” research. However, I believe that IT management has the opportunity to discover and lead innovations within the business. Scott Anthony, in *The Little Black Book of Innovation*, defined innovation as “something different that has impact.” I like this definition because it sounds like a mission statement for any IT organization.

The ultimate success would be to create a sustainable competitive advantage. As fast as technology is changing, it seems unlikely that a company, in the absence of a monopoly, can create a sustainable competitive advantage (e.g., Microsoft and Office) in today business climate. There have been many notable IT contributions to creating a competitive advantage such as package tracking by FedEx, shopping cart processing by Amazon, airline ticketing via Sabre Reservation System by American Airlines or use of data warehousing to manage inventory and stockouts at Walmart.

There are thousands of IT organizations but we always hear about a handful that have created a competitive advantage. This could disillusion many IT leaders. This is where the original proposed definition of innovation becomes important; “something different that has impact.” An innovation does not have to provide a competitive advantage, but it has to provide the business with opportunity to approach an opportunity in a different manner.

The first thing to keep in mind is that technology for the sake of technology is seldom successful; therefore, the proper alignment with the business is key. Most innovation in the business world is the result of a business idea supported or led by a technology implementation. Sometimes these innovations are somewhat accidental. When working with one company in the past, the original objective was to provide a means of receiving payment on our equipment maintenance contracts quicker. These equipment maintenance invoices could actually be boxes of paper; hence, the business proposal was to put the invoices online so that the accounts payable organizations in banks or retail institutions could reconcile the invoices easier. In order to accomplish this objective, we had to create a portal to allow access to these invoices in a secure fashion. After a successful implementation, we realized that some users in these companies were spending hours and days on the application. After a customer focus group, we realized that customers were using the electronic invoices to keep their fixed asset systems up-to-date because our service techs would update the serial numbers and locations any time they did maintenance on these devices. These banks and retail companies were always moving their devices/assets to surge resources or to relocate them based on closing locations and opening new locations.

This revelation and other needs that surfaced in our focus group led us to create a completely new service offering (company_name@your.service) providing a number of new capabilities for our customers. At the time, this solution was viewed as an innovation by the industry and the Gartner Group. As the narrative conveyed, it was a combination of a new business model and new technology (portal technology at the time was new) to provide this new service offering to our customers. Sometimes an innovation occurs not because we have a white sheet of paper but because we followed the needs of our customers.

continued on page 3...
Once a company is willing to make an investment in a system or business model, it is worth thinking out of the box to determine if there is an opportunity to take a different approach that might increase the “impact” of the investment. Many times the business is not aware of the opportunities to do things differently. For example, companies with ERP systems periodically update these systems for supportability, but they seldom look at the new functions being delivered and what impact this may have on the business.

The last company I worked at manufactured gaming machines in China and shipped them to Australia, but due to improvements we made in our manufacturing processes in the US, the ability of our procurement teams to reduce materials costs, and the raising wages in China, it was cheaper to now manufacture the gaming machines in the US. However, the corporate income tax that we would pay on the gross margin in the US made it impractical to move the manufacturing to the US. That is when the combined IT, supply chain management and tax team came up with an innovative way to solve this problem. Using the ERP system, which we had just completed the global rollout, the team created a software defined contract-manufacturing center within our manufacturing (ERP) software. The raw materials were all purchased by our Australian subsidiary (the final destination of the machines) from our local suppliers, assembled in our contract-manufacturing instance of ERP in the US, and then shipped to Australia with a small contract manufacturing (assembly) fee for which the taxes were insignificant. This project was highly successful because it brought jobs back to the US, lowered the costs of building these machines, and reduced the cost of all the other machines being built in our plant because of the lower absorption rate per machine. (i.e., spreading the fixed costs of the plant by 65,000 machine versus 50,000 machines built before this project)

A key point I want to make is that the two examples provided were not successes because of a particular leader, but because the individual teams were innovative in their approaches. The IT teams in the examples met with the business on an ongoing basis and had to look at the available technology tools to let the business know that there might be alternatives to the way they were currently doing business.

Companies that do not find ways to innovate find themselves in the midst of an Innovator Dilemma, where they continue to improve the current way of doing business and miss a new technology and/or business model that leaves them stranded. One of the classic examples was BlockBuster, who could not abandon making brick and mortar stores the center of their business model, while Netflix and RedBox had changed the model. In the end, BlockBuster was exploring technologies to create DVD, on demand, in less than two minutes in their stores, but it was too late.

Creating an environment of Innovation is not a nice to do, but essential to ensure the success of your company. It is innovate or perish, and because technology has become so ubiquitous in both business and its products, it makes the IT organization part of the team. In the absence of a multiple step model, the recommendation from this article is to create alignment, build relationships and collaborate openly with the business at all levels of the organization.
A few years ago, our company started talking about developing a more innovative culture to get better business results. Our belief was that a focus on increased innovation would also help us re-evaluate legacy processes and tools, improve employee efficiency, and increase employee engagement by tapping more into their creativity.

After we took the traditional steps of including innovation into our corporate value statements, we knew we'd need to find ways to inject innovation into our day-to-day work. But what tweaks were needed to encourage more experimentation and risk-taking without sacrificing quality or accountability to our clients?

Change as an Opportunity

Like us, your company is likely affected by numerous external factors like service partners, distributed suppliers, and cloud services. These ever-increasing complex dependencies create an enormous cycle of change that can challenge the best laid plans. Our hope was that we could leverage this inevitable change cycle to encourage innovation across the organization.

PDSA: A Low-Risk Experiment

One of our first tweaks was to start managing planned changes wherever possible as PDSAs. PDSA is an experiment that stands for the repeated cycles of Plan-Do-Study-Act.

- **Plan**: Explore the change/idea, how to test it, and predict the (awesome!) results
- **Do**: Implement your plan, keeping it simple and cheap
- **Study**: Compare the outcomes of your implementation to your predictions
- **Act**: Adjust your plan/scope/budget and re-run the PDSA cycle, or stop the experiment (depending on the Study results)

Like all great ideas, PDSAs put a framework around common-sense guidelines: try something with low-stakes and keep expanding your experiment as you gain confidence that it's the right idea based on first-hand real-world experience.

Beyond planned changes, we're also looking to start PDSAs when a staff person makes a great case for why a new solution or process should be considered. This is critical to ensuring we're tapping into employee creativity. After all, studies repeatedly conclude that the biggest innovations start with those employees who keep the business running at the most detailed levels.

Gaining Confidence

Examples of our PDSA initiatives run the gamut from simple (should we have an organization-wide standup meeting once every week?) to complex (how can we better leverage Business Intelligence to make better financial decisions?). Our first cycle for any PDSA is low-commitment, low-cost, and low-risk – we're just trying a small version of the bigger idea to get some basic feedback. If the synergy we were hoping for isn't present, we can quickly close out the first PDSA cycle and move on to a different idea.

If the first PDSA cycle yields promising results, we consider how to expand the scope and budget to re-run the PDSA again. Each PDSA cycle increases our confidence and comfort with commitment, and we incorporate what we learned from previous cycles into future cycles.

Making Choices that Keep Conversations Going

For those initiatives that don't require major commitment (like stand-up meetings), we stay in the PDSA cycle indefinitely. We prefer this indefinite cycle because it keeps the door open to conversations about “is this still valuable” or “is an adjustment needed due to an external change” – without casting judgment or forcing confrontation.

Sometimes an initiative has built up our confidence using several PDSA cycles but requires a final commitment (e.g., a hardware purchase or a systems migration). In these cases, we'll adopt traditional project management discipline for the implementation but still look to retain as many PDSA elements as possible. For example, for services we’ll lean toward subscription models instead of one-time, up-front purchases. We're always looking to continue data gathering and staying flexible so that we can adjust to unplanned changes in our ecosystem.

continued on page 5...
Promising Results

We transparently list all our PDSAs on a central whiteboard where employees and guests can see them. We’ve observed increased employee engagement in idea-generation, as well as a general expectation that anyone’s idea could be the next PDSA. And importantly, success and failure have taken on healthier meanings: an experiment that ends after one cycle isn’t failure at all but instead a quick and affordable way of knowing what not to do.

Aside from engaging the creative spirit of the staff, we are becoming more comfortable with change as a constant part of our business plan. And if we’re going to plan for change, we should be looking at how to gather first-hand experience specific to our organization wherever possible to best inform our decisions.

Walking the Talk

Our company leadership has helped drive this more innovative culture by listening for ideas, supporting testing the ideas through PDSAs, and being open to feedback on their own initiatives. This has been instrumental for us in influencing the culture.

If you’re looking for this support from your leadership, consider registering yourself and your manager in the Aileron workshop “Leading With a Systems View.” The workshop challenged us to consider different ways to manage people and projects in a world of continuous change, with PDSAs being an important tool in that toolbox.

Our company took one additional step that is a big PDSA in and of itself: they created a role devoted to developing a more innovative culture (me!). This role is designed to cultivate innovation across the company, find connections across departments, and champion ideas from staff at all levels. Given the relatively small size of our company, this role also includes project management of organization-wide initiatives – providing an opportunity to influence the way we test and implement solutions across the company.

Share Your Story

As we keep moving down this path as an organization, we’re staying open to adjusting our approach based on experiences inside and outside of our company. How is your organization approaching innovation and navigating change? I’d love to swap stories over a beverage of your choice: drop me a line on LinkedIn or look for me at the CIO/CEO Council events.
Featuring Breakout Sessions topics such as...

**Machine Learning: From Science Fiction to Reality**
Austin Gresham
RoundTower Technologies

**AI in Healthcare: Hope vs. Hype**
J.D. Whitlock
Dayton Children's

**From Easy Targets to Resilient Allies: The Social Science of Cybersecurity Awareness Training**
Dr. Thomas Skill
Dr. James Robinson
University of Dayton

**Hired for Strategy but Never Getting Out of the Weeds**
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- NEW THIS YEAR: Emails for attendees will be included on Attendee List for conference follow up!

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- Breakout Sessions - Totes - Lanyards - Passport - Early Bird Prize

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UPCOMING EVENTS

JULY

Women 4 Technology - DAYTON
Opportunities over Problems
Featuring: Dr. Cheryl Schrader, Wright State
Tuesday, July 2 | 3:00pm-4:30pm
Business Solutions Center
1435 Cincinnati Street, Suite 300
Dayton, Ohio 45417

CIO/CEO Council (IT Leaders Only!)
Artificial Intelligence and Automation: Overview and Anticipated Outcomes
Facilitated by: Dr. David Wright, University of Dayton
Thursday, July 18 | 11:30am-1:00pm
Business Solutions Center
1435 Cincinnati Street, Suite 300
Dayton, Ohio 45417

AUGUST

CIO/CEO Council (IT Leaders Only!)
Annual IT Talent Attraction & Retention Meeting!
Facilitated by: Technology First
Thursday, August 16 | 11:30am-1:00pm
Hilton Garden Inn & Banquet Center
3520 Pentagon Blvd
Beavercreek, Ohio

Data Analytics SIG
Natural Language Analytics
Facilitated by: Rob Keefer, Illumination Works
Friday, August 23 | 8:30-10:00am
Business Solutions Center
1435 Cincinnati Street, Suite 300
Dayton, Ohio 45417

Infrastructure/Cloud SIG
Talent Management
Facilitated by: Jeff Reed, Midmark Corporation
Friday, August 23 | 11:30am-1:00pm
Business Solutions Center
1435 Cincinnati Street, Suite 300
Dayton, Ohio 45417

W4T Cincy 2nd event this August! We are still planning so check the website for updates!!

Problem Solving:
Opportunity Finding
when it isn’t about the problems at hand, but the opportunities that lie within them

presented by:
Dr. Cheryl B. Schrader
President, Wright State University

Tues. July 2nd | 3-4:30pm

Women 4 Technology
Leadership • Networking • Professional Development • Mentoring
In 2016, the Southwestern Ohio Council for Higher Education (SOCHE) established Cincinnati-Dayton Cyber Corridor (CinDay Cyber) with regional colleges and universities to increase the pipeline of students pursuing cybersecurity careers in the Cincinnati and Dayton region, help the current and future workforce attain the skills they need for well-paying jobs in cybersecurity, and support local economic development to stimulate job growth for both government and private industry. CinDay Cyber promotes the adage “It takes a village”, which is clear in the strong alliance they built to include academia, employers, and state and local economic development organizations. This partnership is crucial to help identify cyber gaps to better meet the region’s current needs and build today’s high-quality cyber workforce and tomorrow’s future pipeline.

Over the last few years CinDay Cyber members have developed some very challenging goals in order to achieve the mission of the organization. Collaboration has proven to be the key in achieving goals and making an impact on the community, workforce, and student career path selection.

CinDay Cyber members have established a primary goal of building a cyber ecosystem. High quality education programs are the first requirement in the development of a robust cyber workforce. Over the last few years the academic members have come together to support each other in obtaining the National Security Agency’s (NSA) Center of Academic Excellence (CAE) designations in Cyber Defense and Operations. The region has the honor to boast about our many CAEs. The institutions who have earned this prestigious academic recognition are: Air Force Institute of Technology, Cedarville University, Clark State Community College, Sinclair Community College, University of Cincinnati, and Wright State University. Other institutions like the University of Dayton are actively pursuing the designation.

Additionally, the CinDay Cyber academic institutions have continued to build the region’s ecosystem by forming partnerships. They have received many State and Federal grants for research and development of cyber solutions, K-12 cyber camps and cyber awareness programs, curriculum creation across all levels to strengthen cybersecurity education programs, and scholarships for professionals who are interested in obtaining advance degrees in cyber.

Clark State’s two-year CyberSecurity Program is a perfect example of how we are building a strong future workforce through partnerships. The program offers veterans and individuals with a bachelor’s degree the opportunity to receive a paid scholarship (tuition, fees and books), a stipend ($22,500/year), CyberSecurity internships, a government security clearance, and ultimately full-time government employment!

Last year CinDay Cyber helped secure State funding for the University of Cincinnati to develop a Cyber Range for students at all institutions in an effort to enhance their hands-on learning experience. The Range recently opened for industry partners to test their vulnerabilities so that clients will have the confidence that they are conducting business in a secure environment.

CinDay Cyber recognizes our community’s desire to offer many diverse avenues to build the ecosystem which includes sharing of knowledge and best practices. For example, the University of Dayton hosted a webinar on “Educating for Cyber-mindfulness” and our knowledge experts are regularly presenting or representing expert panels at national and local events like Technology First’s Ohio Information Security Conference, Dayton Cyber Defense Conference, and Wright Brothers Institute’s (WBI) University and Industry Collaboration Workshop. Additionally, Wright State University frequently offers Hack-a-Thons for not only students, but interested members of the community who prefer hands-on learning opportunities.

An additional tactic used by CinDay Cyber is the formation of partnerships to solve cyber-related challenges. Our members have a “we not me” approach to tackling issues and achieving successes to positively impact the region’s workforce. Members utilize quarterly roundtables to provide professional development opportunities, increase collaboration, discuss projects and programs, solicit advice from colleagues, and strategically plan for future grant opportunities and upcoming events. We also come together to support National initiatives. For instance, Sinclair Community College hosted a Career and Technical Education Cyber Security meeting on behalf of the National Science Foundation (NSF) with representation from the NSA, Department of Homeland Security (DHS), and National Initiative for Cybersecurity Education (NICE) which is supported by National Institute of Standards and Technology (NIST) to discuss the needs of Cyber Education in the high schools.

Ohio University’s dedication to this challenge is displayed by their investment in the Russ Research Center located in Beavercreek, Ohio. It is

In 2018 Cedarville University was designated as an NSA Center of Academic Excellence in Cyber Operations. Only 20 schools nationwide have that designation.
the home to a new consortium focused on some of the U.S. Air Force’s most crucial research priorities, including autonomy, precision navigation and timing (PNT), and cyber-physical systems security.

CinDay Cyber is always mindful of their industry partners and their challenges to secure a quality workforce for today and across the next five years. It is no secret that STEM (Science, Technology, Engineering, and Math) students are in great demand, specifically those students with cybersecurity curriculum. In fact, 50% of students in an intern program continue working full-time at the same company after graduation. We want the best opportunity for our students and industry partners, so we work closely with SOCHEIntern. Through this partnership we have hosted over 800 internships over the last three years at Wright-Patterson Air Force Base, local governments, and regional companies with the majority of internships in STEM-related fields that include cybersecurity elements.

Another CinDay strategy to better meet workforce demands is through local and regular engagement of the college or university with local industry. This engagement has promoted a better understanding of their industry neighbor’s needs and fostered better educational programming that best meets local industry’s needs. Moreover, these relationships have helped industry to better understand the importance of experiential learning opportunities for students. As a result, they have sponsored numerous events like hack-a-thons, career mixers, and hundreds of STEM-related internships!

Our final strategy is to define educational pathways at all levels for individuals interested in pursuing careers in cybersecurity. We are continuously analyzing the information provided by our industry partners like Technology First and Dayton Regional Manufacturing Association (DRMA) to design new courses, certification certificates, and degree programs that meet current and future workforce demands. Wright State University has added a Bachelor of Science in Cybersecurity so their students have an option to achieve a certification, Bachelor, Master’s, or PHD. Clark State and Sinclair Community College have established articulation agreements with many of our four-year institutions to allow their students to advance their cyber education. Cedarville created the Center for the Advancement of Cybersecurity, whose mission is to advance cybersecurity in our nation by developing tomorrow’s cyber leaders in the classroom, shaping cyber education in the academy, and promoting cyber awareness in society. And, finally, Dr. Tom Skill, Associate Provost, CIO & Professor, was recently named as one of the top cybersecurity professors to follow on Twitter as he discusses University of Dayton’s Center for Cybersecurity and Data Intelligence.

For more information about how CinDay Cyber Corridor is tackling our region’s workforce issues or join us in our efforts, visit https://www.cindaycyber.org/. Our website contains critical resources that can help develop your workforce including: access to hundreds of high school and college STEM students looking for internship opportunities; Degree Finder, a comprehensive listing of over 700 academic opportunities available at SOCHE member colleges and universities; the Ohio Workforce Supply Tool, which helps businesses identify the number of skilled workers available in key occupations and relative earnings; and finally, links to upcoming conferences and events.

CinDay Cyber Lead Partners and Supporters

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Sinclair Community College
Southwestern Ohio Council for Higher Education
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University of Dayton
Wright State University

Economic Development
Dayton Development Coalition
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K-12
Dayton Regional STEM School
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Government
Jobs Ohio
Representative Warren Davidson
Representative Mike Turner
Senator Sherrod Brown
Senator Rob Portman
When thinking about innovation and invention in the Dayton region, several names come to mind: Charles F. Kettering, Edward Deeds, Joseph Desch, just to start. What do all these individuals have in common other than the tremendous impact they’ve made on society? NCR.

NCR was founded in 1884 when John H. Patterson and his brother Frank J. Patterson purchased the company (formerly known as the National Manufacturing Company of Dayton, OH) and its patents. The company would sell the first mechanical cash register invented by James Ritty and go on to pave the way for some of the greatest inventors of the 1900s.

Edward Deeds (pictured right) was hired at the National Cash Register Company in 1899 as a Factory Engineer. His resourcefulness and initiative impressed Patterson and earned him the title of Assistant General Manager a few years later. Deeds' focus in the early 1900s was to motorize the cash register to make it easier to operate. He obtained the patent and hired Charles F. Kettering (pictured below), an engineer, to perfect the design. Once they electrified the cash register in 1906, the doors opened for them even further.

While still at NCR, Deeds and Kettering would develop a friendship and business partnership that led them to transforming the automotive industry. Leaders of 'The Barn Gang', Deeds and Kettering worked tirelessly in Deeds' backyard barn. This barn would serve as their own innovation hub where through collaboration and perseverance they would invent the electric ignition system. The two inventors then founded the Dayton Engineering Laboratories Company (DELCO) in 1909, which became a major branch of General Motors and fueled GM's success for many years. The Barn Gang developed the self-starter for the 1912 Cadillac a few years later.

By 1915 Deeds and Kettering had both departed NCR to pursue many more endeavors that shaped the Dayton we know today. Without NCR bringing them together, who knows where we would be!

Further promoting innovation in Dayton, Deeds and Kettering founded The Engineers Club of Dayton in 1914.

JOSEPH DESCH

A graduate of the University of Dayton, Joseph Desch (pictured right) would go on to work at the National Cash Register Company. Through this early work experience, Desch acquired a reputation as an innovative engineer that would lead him to brilliant accomplishments.

Perhaps the most impressive and intriguing of Desch's accomplishments was his work on the four-rotor Bombe that would be used by the Allies in World War II to decode the German Enigma machine. Desch’s relentless work on the four-rotor Enigma lasted about a year after the U.S. Navy contracted NCR to aid in the difficult task in 1942. NCR selected Desch to be the principal engineer on the project, who at the time served as the head of NCR's electrical research laboratory. By turning complex cryptanalytic theories into a practical blueprint for constructing a working machine to solve the four-rotor Enigma, the Bombe that Desch designed in Dayton is believed to be an important component of Allied victory in Europe in World War II. Perhaps some could consider him one of the first white-hat hackers!

Edward Deeds, Charles F. Kettering and Joseph Desch are just three of many contributors to the innovative successes in Dayton. Their hard work, perseverance, and utter brilliance made Dayton the hub of innovation that inspires everyone to this day.

References:
Bernsten, Mark, “John H. Patterson—John Patterson rang up success with the incorruptible cashier;” The Engineers Club of Dayton Foundation, www.daytoninnovationlegacy.org/patterson.html

Edward Deeds, Charles F. Kettering and Joseph Desch are just three of many contributors to the innovative successes in Dayton. Their hard work, perseverance, and utter brilliance made Dayton the hub of innovation that inspires everyone to this day.
Multifunction Printers and Copiers: IT Security

By: David Owens, VP of Sales & Marketing
Full Service Networking, a Modern Office Methods Company

Over the last decade, office technology has advanced tremendously. Networked printers and copiers have taken this technology to the next level, providing businesses and organizations with a host of advantages such as flexibility, functionality, increased efficiency, and reduced costs. Unfortunately, many organizations are not aware of the potential risks involved with networked printers and copiers. Like computers, today’s networked multifunction printers and copiers are vulnerable to data breaches unless they are secured. A wide range of organizations, from schools to hospitals to businesses, are all putting themselves at risk with unsecured end-points running on their IT networks.

The purpose of this article is to provide you with an overview of the steps you need to take in securing your multifunction printers and copiers to protect your valuable data and sensitive information.

Performing an Audit of Networked Printers and Copiers
Depending on the size and scope of its operation, it is not uncommon for an organization to be unaware of what devices are connected to their network, or whether these devices have been configured with the proper security checks. The printers and copiers themselves can create a security risk if they are running with outdated firmware.

An aspect of security that is often overlooked is once you are ready to retire a printer/copier or return it to a leasing agency, it is crucial that you remove any data that may be retained in the hardware’s memory. Ensuring that the device’s hard disk is erased, destroyed, or removed will provide you with a final added measure of security.

Securing Access
Start the process of defending your printers, documents and data from network threats by physically securing your printers and copiers. If possible, move printers that are out in the open into a controlled access area. Access can further be controlled by disabling physical ports to prevent unauthorized use.

Data can also be protected by authenticating users and attaching them to their specific documents. Document owners are then required to authenticate themselves to the printer or copier before their documents will print.

Disabling Unnecessary Services and Protocols
To provide the users of office technology with efficient, turn-key product solutions, many printer and copier manufacturers are offering models with a wide range of services and protocols built in.

Many of these enabled-by-default protocols are unnecessary and not secure. Leaving these services enabled may provide attackers with the ability to access the printer/copier data directly.

Securing Data with Encryption
Wireless technology has been an amazing advancement in promoting efficiency and productivity in the workplace. Unfortunately, with the benefits come risks. Your documents and data become highly vulnerable as they traverse the “wireless network” to a multifunction printer or copier. Once your information makes it to the hardware's memory or storage, it is susceptible to attack there as well.

The best way to protect sensitive data within your network is with encryption. Encrypt print and copier jobs to secure data in transit in the event of interception and use encrypted storage to protect documents in the device's queue.

Keeping Up with Patches and Updates
The importance of staying on top of software and hardware firmware updates cannot be overstated. This includes the firmware used in your multifunction printers and copiers.

Some printers and copiers with an internet connection will automatically check for new firmware and install it. Others will require you to periodically visit the manufacturer website for firmware update downloads, which you can retrieve and install yourself.

Ignoring updates and patches will likely result in the development of critical vulnerability points in your network.

Selecting Secure Multifunctional Printers and Copiers
Without a doubt, the best way to secure your printer and copier is to invest in technology that is pre-programmed with the most up-to-date device security features. Look for multifunction printers and copiers that are designed to independently detect, protect, and self-repair damage from malware attacks.

As you upgrade outdated equipment, replace it with systems that offer built-in threat detection and software validation features, so only authorized firmware and software can be installed and executed. This will provide your network with an extra layer of security.

Are you in need of knowledgeable and experienced assistance with securing your multifunction printer and copier network? Modern Office Methods (MOM) and Full Service Networking (FSN) are here to help.

www.momnet.com
www.fullservice.net
Karen Kauffman

Director of IT
Precision Strip, Inc.

Did you always want to work in IT?
I originally started college with a degree in Accounting. We did not have many IT classes in high school and I didn’t understand at that time how what we were learning could translate to work in industry. As part of my Accounting major I was forced to take a few IT classes for which I am very grateful. I realized what a good fit IT was for me and changed my major to IT my sophomore year of college.

Tell us about your career path.
I started as a Software Developer and progressed to IT Supervisor, then IT Manager, and ultimately became the Director of Information Technology at Precision Strip.

What business or technology initiatives will be most significant in driving IT investments in your organization in the coming year?
We always strive to use technology to improve safety, productivity and quality and 2019 is not an exception. Automation of warehouses and gathering and analyzing machine statistics are high on our priority list.

Are you leading a digital transformation? If so, does it emphasize customer experience and revenue growth or operational efficiency? If both, how do you balance the two?
We have been leading digital transformation before the term was coined! It impacts both. Typically we focus first on customer experience but we always leave time to work on operational efficiencies. Improving operational efficiencies through IT give us an edge in our market. We use those operational efficiency improvements to avoid having to raise prices for our customers.

What does good culture fit look like in your organization? How do you cultivate it?
At Precision Strip we strive to be a family oriented business. What this means is that not only do we care about each associate's family, we also want to interact with each other as if we are family. Although each person in the organization and department has responsibilities, we all try to help one another out if there is a crisis in someone else's functional area. We also often gather together and celebrate individual or group achievements with food and fun activities as a family would.

What’s the best career advice you ever received?
Although it may be hard to address a difficult situation, most people want to know if they are underperforming. If you have high performers in your department and don’t address the behaviors of low performers, you will ultimately damage your relationship with your high performers. Don’t reward bad behavior by overloading high performers and letting poor performers slack off.

What advice would you give to aspiring IT leaders?
Although it is important to be happy, never be satisfied with status quo. There is always room for personal and professional improvement. Take every opportunity you can get to learn something new. Focus less on the title and more on the value you can provide your organization by personal growth.
IT LEADER SPOTLIGHT

Jim Bradley

VP, IT

Tecomet

Did you always want to work in IT?

Actually, no. I knew early on in high school that I wanted to combine mathematics, business and computers (in that order). My first career goal was to be an Actuary (insurance tables, a lot of math). Even in college, it was the days of programming on cards fed into mainframes, then the almighty line editor on terminals (one line at a time), then finally to the full screen editors on terminals. At work, we then eventually moved to desktops and then to laptops. My degrees were Quantitative Analysis (Management Science / Optimization – which evolved into Data Analytics decades later) and Economics. My first jobs were then in Programming leading to a career in IT.

Tell us about your career path

I started as a co-op student (best decision I ever made), became a Programmer Analyst, then a Systems Analyst, then moved to Technical Lead (where it was hard to give up doing the work). Next step was Software Development Manager, followed by Director of Software Test, then Director of Software Development. Then Y2K Field Team Director / Y2K Manager, PMO. Then Program Manager, Consulting and Systems Integration. Next was Enterprise Program Manager, PMO. After years in Software / Systems and Program Management, moved to Senior IT Director, Global IT Director and finally to Vice President of IT.

What advice would you give to aspiring IT leaders?

Two pieces of advice for aspiring IT leaders, one is to always keep learning and growing and to always stay current, two is to learn to communicate well, especially in terms that the business will understand.

If you do not stay current or continue to learn and grow, there will always be someone else who knows a process or tool better than you. Even if they are younger and less experienced, knowing more makes them more valuable. Even if it means changing your career path. And it really helps if you enjoy what you are doing.

If you cannot communicate well in terms that the business understands, it doesn't much matter what you can do or have done. Doing it is only half the battle. Your users and customers need to understand it to utilize and benefit from it. This is more important before you begin so you can convince the business that it is worth doing.
EVENT SPOTLIGHT

CIO/CEO COUNCIL: In May, our IT Leaders discussed the social sciences behind security awareness within organizations. This intriguing presentation was led by Dr. Thomas Skill and Dr. James Robinson from the University of Dayton Center for Cybersecurity and Data Intelligence.

Municipality IT SIG: This Spring our City Management and City IT Leaders participated in surveys of their technology landscapes and strategies. At their May meeting they discussed the survey results and how their city compares to others. The meeting was kicked off with a presentation by Scot Ganow, from Taft Law. Scot shared about Privacy, Security Policy and Legal Risks.

Infrastructure/Cloud SIG: The ICSIG met last at the end of May before taking a summer break until August. Paul Moorman led a discussion on PowerShell and several members brought their PowerShell scripts and ideas to share too! The ICSIG will meet again on August 23rd to discuss Talent Management...see you then!

Data Analytics SIG: The DASIG met about Data and Application Integration at the end of May. Thank you Mark Wyatt for leading this discussion! The DASIG will meet again on August 23rd to discuss Natural Language Analytics...don’t miss it!
Women 4 Technology - CINCY: Great American Insurance Group hosted our first W4T Cincy edition on June 6th! Our phenomenal panelists shared insights into the challenges they face and the successes they’ve experienced in both their current positions and throughout their careers! Thank you to our panelists Tammy Buchholz (Western & Southern Financial Group), Melanie Church (Great American Insurance Group), Cristine Cravens (Fifth Third Bank), and Nathalie Pottier (Kroger Technology). Thank you also to Michael Lively (Great American Insurance Group) for being a wonderful moderator. W4T Cincy will meet again in August...stay tuned for more information!
Artificial Intelligence and Automation: Overview and Anticipated Impacts

Beyond the hype associated with any new technology, it is clear that society will be broadly impacted by artificial intelligence, machine learning and automation. This session aims to foster awareness and stimulate discussion of the impact of AI and automation on the Dayton region - in terms of both threats and opportunities.

presented by:
Dr. David Wright
Director of Academic Technology & Curriculum Innovation
University of Dayton

Thurs. July 18th | 11:30am-1:00pm

Thank You
Academic Partner!!
People are at the heart of every successful business initiative. At TEKsystems, a leading provider of IT staffing and IT services, we understand people. Every year we deploy over 80,000 IT professionals at 6,000 client sites across North America, Europe and Asia. Our deep insights into the IT labor market enable us to help clients achieve their business goals—while optimizing their IT workforce strategies.

CALL FOR CYBERSECURITY PRESENTATIONS

NOW OPEN!

Technology First is seeking proposals for speaker participation in the March 11, 2020 Ohio Information Security Conference hosted in Dayton, Ohio. A session can be a formal presentation of a successful implementation, administrative solution, or technical solution. Topic content must focus on information security and may range from introductory to advanced or from operational to strategic. Each program session will last 50 minutes, including 10 minutes for Q&A.

Proposal deadline: October 25th!

www.surveymonkey.com/r/OISC2020CFP
Technology First would like to thank and recognize its Board of Directors. They provide input into the strategic direction of the organization and actively lead working committees that drive our programs and services.
Established in 1997

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- 4 Quarterly Meetings

150+ CORPORATE MEMBERS

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CREATING A COMMUNITY TO SHARE KNOWLEDGE, GROW BUSINESS AND BUILD FOR THE FUTURE.

2019-2020

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LEADERSHIP AWARDS
Recognizes contributions of Technology professionals
- Outstanding Technology Team
- Best IT Services Company
- IT Executive of the Year
- Emerging Tech Leader
- Most Promising Startup
- Award of Excellence - Student Project

TASTE OF IT
- 13th Annual 11/13/19
- Anything Technology
- 250+ Participants
- 23+ Speakers including Expert Panels
- 40+ Exhibitors

TASTE OF IT
- 17th Annual 3/11/20
- Focus on Management, Technical and Implementation
- 300+ Participants
- 23+ Speakers including Expert Panels
- 30+ Exhibitors

TECH FORUMS
- 50+ Attendees Each Session
- Recognized Thought Leaders
- 3x/year

CIO COUNCIL
- Company’s Highest Level IT Executive
- Monthly Meetings
- 25-30 Attendees Each Session
- Strategic Planning and Leading Edge Topics

CEO COUNCIL
- Business Owners, CEO’s, Presidents of Regional IT Companies
- Strategic Planning
- Peer Sharing
- Business Development

WOMEN 4 TECHNOLOGY
Four Areas of Focus
- Leadership
- Networking
- Professional Development
- Mentoring

MUNICIPALITY IT
- IT Leaders and City Managers of Municipalities
- Smart Cities and Leading Edge Topics

SMB LEADERS
- IT Leaders and Executives of Small-Medium Businesses

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- Expert Articles contributed by Members
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2019 EVENTS

CIO COUNCIL
(Executive Leadership Only - 11:30-1pm)
- January 17 - Tech Forum (Open Event)
- February 21
- March 29
- April 18 - Tech Forum (Open Event)
  - May 16
  - June 14
  - July 18
  - August 16
  - September 12
- October 18 - Tech Forum (Open Event)
- December 5

DATA ANALYTICS
(Open to ALL - 8:30-10am)
- January 11
- February 22
- April 5
- May 17
- August 23
- October 4
- December 6

CONFERENCES
(Open to ALL)
- OISC - March 13, 2019
- Taste of IT - November 13, 2019

SPECIAL EVENTS
(Open to ALL)
- Digital Mixer - February 13, 2019
- Leadership Awards - May 1, 2019

TECH THURSDAYS
(Open to ALL - 5-7pm)
- February 7
- April 11
- June 13
- Sept 12
- Oct/Nov - TBD

INFRASTRUCTURE/CLOUD
(Open to ALL - 11:30-1pm)
- January 11
- February 22
- April 5
- May 17
- August 23
- October 4
- December 6

WOMEN 4 TECHNOLOGY
(Open to ALL)
- January 23: DAYTON
- June 6: CINCY
- July 2: DAYTON
- September 5: DAYTON

MUNICIPALITY IT
(for City Managers and Muni IT Leaders)
- May 22
- Summer- TBD
- Fall - TBD
- Winter - TBD

For Registration and Membership information, visit www.technologyfirst.org or call 937-229-0054

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