And the Nominees Are In!

By: Ann Gallaher, COO, Technology First

The Technology First Leadership award recognizes the contribution of information technology professionals ensuring a vibrant Dayton community. Recognizing Individuals and Teams exemplifying Technology First Values: creating a community to share knowledge, grow business, and explore the future.

On May 15th, Technology First will host our first technology awards event and begin to recognize individuals and teams who are making a difference in the information technology sector and the greater Dayton community.

Categories Nominees Include:

EMERGING LEADER AWARD

A junior level professional exhibiting excellence in the workplace and leadership in the Dayton area IT community.

- Nick Timmerman, Midmark
- Treg Giltstorf, Yaskawa Motoman
- Hanen Alkhafaji, PQ Systems
- Ryan Allen, University of Dayton

OUTSTANDING TECHNOLOGY TEAM

An IT department that has impacted the efficiency, productivity, and performance of their company.

- WinWholesale
- Sinclair Community College
- Premier Health
- Lion
- Montgomery County Data Processing

COMMUNITY ADVOCATE OF THE YEAR

An IT professional or organization that has enhanced the adoption and use of technology through volunteer contributions.

- Jaci Jackson, University of Dayton
- Steve Hall, Mckenna Golf / Scholarship Committee
- Tim Hull, Bilstorn Web
- Dennis Brown, WinWholesale
- Gary Gitner & IT Leadership Team, Premier Health

BEST IT SERVICES COMPANY

An IT company that has increased its investment in the Dayton region through revenue, jobs, or capacity.

- Sogeti
- Datayard
- Afidence
- Mafazo
- Lighthouse Technologies

IT EXECUTIVE OF THE YEAR

A senior level professional responsible for influencing progress and developing teams through leadership excellence.

- Steve Hangen
- John Huelsman, Hobart Service
- Bryan Hogan, Afidence
- Steve Daum, PQ Systems

Please join us on May 15th at the Flight Deck of the University of Dayton for this celebration of leadership and economic development!

Do you want a blog site where everyone knows your name? We hope so. Technology First’s blog features members of Dayton’s IT community commenting and linking to posts that they find valuable. There are several new posts every week. Other ways that our community is getting interactive is our Twitter account @technologyfirst and our LinkedIn group. If you would like to contribute to this blog, please contact Ann Gallaher at agallaher@technologyfirst.org.
Hybrid Cloud Use Cases

By: Mark Neistat, US Signal

A Fundamental Change in Data Center Assets

A hybrid cloud, at its most basic configuration, is the composition of a private cloud and at least one public cloud. Compute, storage, and networking resources are distributed across each environment. Hybrid clouds have started to change how data centers operate.

Instead of being a "catch-all" for any computing need, data center functions are becoming more specialized. For example, the in-house private cloud can host a line of business-specific applications; the public cloud can be used for expanding and contracting workloads. This type of leverage allows an organization to maximize their existing data center investments.

The key to successfully using a hybrid cloud strategy is how these resources are managed. This is especially important because it is becoming more common for a hybrid configuration to involve more than one public cloud. These resources need high visibility. What this means from an IT perspective is that logical protocols are developed so all the virtual resources can be controlled from a single view. It is important to understand the different cloud topologies, be able control the bandwidth, and be confident in the security measures. Otherwise, an organization can end up with different silos of technology not working in concert, defeating the purpose of a hybrid environment.

Below are some of the use cases for hybrid cloud.

Untested Workloads:
"Fail fast, fail cheaply" is a mantra cloud developers are wise to chant.
The public cloud is ideal for working out the bugs of an application prior to moving it to a more costly private environment. An organization can establish a steady-state workload and estimate the longevity of an application prior to loading customer data into it.

Packaged Applications:
With flat or declining budgets, IT is under pressure to free up existing resources for high value projects. Standard email packages and established collaboration software can be moved within a hybrid environment.
The flexibility of the hybrid cloud allows businesses to free up the most critical virtual resources – whether in the private or public pieces of the hybrid cloud.

Cover Legacy Gaps:
Legacy systems and applications are never replaced all at once (if ever). Moving applications and data into the public environment while the private one is reconfigured allows businesses to operate as usual. This allows the transition to be transparent to the customer so that their service experience is uninterrupted.

Web/E-Commerce:
Online retail stores require public-facing web assets outside the firewall and business critical assets onsite. Social networking sites possess highly confidential data and must configure privacy controls to limit content exposure to only certain defined groups within the users' connections. Hybrid cloud can meet these two requirements as well as handle the heavy use these types of sites engender.

Cloudbursting:
Time for another mantra: "Buy the base, rent the spike." This refers to situations where workloads are migrated to a different cloud environment to meet capacity demands. For example, the typical steady state of an e-commerce site is handled by the fixed private resources, then the traffic produced by the spike in purchases is handled by the on-demand resources in the public cloud. For cloudbursting to be practical, organizations need secure, low-latency network connections between private and public clouds – something US Signal can do with its Network-Powered Cloud Hosting Services.

Disaster Recovery:
Achieving a highly available, geographically redundant setup for a private cloud is expensive. It requires at least twice the capital (usually more) of a single private cloud. In a hybrid environment, the lower costing public assets can be used at the recovery environment.

A hybrid cloud should allow a business to leverage their existing infrastructure. In practice, new solutions should connect to existing ones so operations or transitions are faster, more efficient, and flexible. A hybrid cloud should help your business create an impactful customer experience and remove barriers to reaching revenue goals.

About the Author: Mark Neistat is the Field Marketing Manager for US Signal. Utilizing the resources of US Signal’s highly-skilled marketing team, he works directly with partners to develop and implement detailed strategies that create awareness, build their brand, and highlight combined strengths. Mark’s diverse career included stints as a call center manager, selling network services, product marketing, and, with US Signal, assisting in developing the go-to-market strategy for Cloud Hosting. Today, he uses his over 25-years’ of sales and marketing experience to contribute to the US Signal blog – which he thoroughly enjoys.
How Not To Become A “Target”

In mid-November last year, the retail giant Target experienced a security breach where customers’ credit card information was stolen. At first it was thought that 40 million users had been affected but by January 2014, those numbers skyrocketed to a stunning 100 million.

What emerged was the story of hackers who had appeared as “the good guys” in order to harvest as much information as they could from Target’s network. Not only did they steal sales data, but names, email addresses, home addresses and phone numbers.

And they didn’t just hit the network once. Data was harvested almost daily over the course of several weeks. Malicious software was installed on Target’s point-of-sale (POS) devices located at the checkout point. But the hackers also made use of Port 80, which is the route used for Internet browsing traffic.

The hackers used this port as a way to bypass software firewalls and roam freely within the network. As you can imagine, this is every IT department’s worst nightmare.

George Photakis, a former CIO of Anchor Hocking, said, “A big problem with the Target breach was that customer credit card information was stored on their servers. Which is amazing.” Photakis added that most companies use a third-party credit card administrator and it is the administrator that verifies the credit card information in order to prove it’s a valid transaction.

He added, “Most companies only store the verification codes and the third-party administrator’s keep the confidential account information. I can’t believe that a company as large as Target would not do this. I’ve never seen anything like it.”

It’s not just larger organizations that are at risk. According to Verizon’s Data Breach Investigation Report 2013, 75% of security breaches happen to small businesses.

What could Target have done to prevent this massive security breach? And more importantly, what can you do?

1. **EMPLOYEE AWARENESS:** It is extremely important to have an ongoing security education program for your employees that trains them to use strong passwords and avoid dangerous links, email phishing experiments, and attachments that may contain malware.

Your employees are like a virtual firewall. Unfortunately, they can also often be manipulated by a hacker. The adage, “trust but verify” is vital to remember. Many times a hacker will call an employee and appear as a fellow worker or person of authority. Very often, an employee will too easily trust someone and give them sensitive information, such as a password, in order to “help” someone. Only a consistent training program will remind employees that it is imperative to keep such information secure by never sharing it with someone whose identity they can’t verify.

2. **KNOW YOUR DATA AND LIMIT ACCESS:** Another important step is to know who exactly has access to confidential data. Credentials should be limited. Your employees should know where confidential data is stored and that it’s in a secure location. Keep a record of the employees who have access.

Also, if you plan on terminating an employee, it is wise to limit their access before the termination occurs to prevent insider threats, where a disgruntled employee takes advantage of their access codes in order to damage the network.

3. **TRACK LAPTOPS AND MOBILE DEVICES:** Employees often forget the risk they take when transporting company electronics such as laptops and tablets. You should keep a record of all the devices your employees use and verify their whereabouts at all times.

This is another opportunity to train your employees to secure your company’s confidential data by requiring a frequently updated tracking report as a means to prevent potential data breaches. There have been many times when an employee carelessly left a company laptop in their car and it was stolen. Use security tokens to ensure that only those with the right credentials are able to access sensitive data.

4. **KEEP YOUR OFFICE AND WORK AREAS SECURE:** Your servers should be in a secure area with limited traffic. Locked doors or keypad entries will help limit the number of employees who can access your physical assets. Many hackers have pretended to be service personnel in order to get by a company’s gatekeepers, such as the reception desk. Train your employees to always be on the lookout for someone who doesn’t look like they belong in the area or an unfamiliar face.

(continued on page 5)
5. DEFEND AND PROTECT YOUR WEBSITE: Install anti-virus software on all of your servers and demonstrate that you are trustworthy by using trustmarks on your website. Make sure your employees are trained to recognize an alert and have a standard procedure for contacting the IT department if a threat is detected. Some software can work in the background of the end-user's desktop so they're not alerted but instead, the system administrator receives a notification. As a result, employees aren't panicked and it can decrease the amount of help desk calls.

6. DEVELOP STRONG SECURITY POLICIES: Many businesses don't think of security plans until a breach happens. This is a time when clear heads are needed but instead, confusion reigns as personnel use precious time to figure out who to call. A business should develop and create a well-planned policy that includes device use and the best way to dispose of secure information.

When it’s time to retire devices from your company’s list of supplies, you need to wipe them clean. Make sure to reformat hard drives or USB keys before getting rid of them. Also have paper shredders available so employees can safely dispose of any sensitive documents. Some companies call a professional shredding company that brings out a vehicle to shred papers on-site.

7. ELIMINATE INSIDER THREATS: You can minimize risk by running a thorough background check on employee candidates before you hire them. Especially pay attention to any stories you can find about someone being disgruntled and taking any opportunity to retaliate against a former employer. It's difficult to foresee every potential threat but the more areas of concern you can uncover in a potential hire, the better.

Taking these steps will help you greatly reduce your risks of losing sensitive data. To go deeper with your security, look into partnering with an information security vendor who understands your business. They will be able to reveal areas of vulnerability you may have missed.

Remember, it’s not just your data you’re protecting. It’s your reputation. More customers and clients are concerned about their sensitive data remaining secure. Because if you lose their confidential information, you’ve lost their trust.

And that’s hard to regain, once you’ve become a “Target.”

Mr. Max Aulakh is the owner of Mafazo Digital Solutions, a Dayton, Ohio-based cyber strategy & engineering firm that provides solutions to the Healthcare, Higher Education, Financial, Defense and Manufacturing industries helping them to become agile and adapt to technological change.

Max emigrated from India to the United States with his family as a teenager. After attaining US citizenship he joined the Air Force, where he worked across Turkey, Iraq and Afghanistan as a Security Specialist. Under his guidance, the company provides cyber strategy services, thought leadership in cloud security, and develops technical training materials.
SSD Explained

By: Dan Auger, Software Informations Systems, LLC

I've had lots of conversations about SSD/Flash over the last few weeks. I understand the confusion around SSD drive types, and thought I would take a minute to explain the landscape.

HISTORY:
Flash started in the 80s with NOR-based flash. The purpose of NOR-based flash was to address burning EPROMs back in the 80s and early 90s. NAND based drives were introduce in the late 80s or early 90s as a mechanism to replace spinning disk. How you access the two types of drives differ. NOR based drives are accessed block-by-block (similar to how EPROMS were used), while NAND based drives are accessed bit-by-bit (similar to how hard drive use). For hard drive replacements, NAND was selected as its access is very similar to how spinning disk are accessed. Further, it's cheaper to manufacture as NAND Flash technology uses about half the components of NOR based technology.

NAND based flash retains its state by trapping electrons in the underlying floating gate logic, meaning the cell will retain its state even when powered off.

Leap forward 20 years and today you really have 4+ types of SSD/Flash drives available today. All four of these are NAND Logic based drives. Three have made their way to the enterprise market. The fourth, Triple Layer Cell (TLC) and the fifth (x4 Flash) we will talk about briefly. Both of these may find their way to the enterprise market. The fourth, Triple Layer Cell (TLC) and the fifth, Enterprise Multi-Level Cell (eMLC) we will talk about briefly. Both of these may find their way to the enterprise market.

It's important to note that all Flash technology hold cells in an unused portion of the drive which you cannot access. These cells are activated when other cells start to fail. Cell failure is really caused by erase cycles and counting how many erase cycles have happened over the life of the drive. Each manufacturer works a bit differently here, and they do not publish those details.

TYPES:

1). SLC (SINGLE LEVEL CELL) For Flash technology, these are considered the highest performing and most reliable drives on the market and are positioned as such. Single Level Cell really means that each cell stores 1 bit of data, or there are 2^1 or 2 (binary 0 and 1) operational states.
   • One bit per cell – fastest write time
   • Fastest access time – in the 10-100 micro second range
   • SLC technology can sustain more writes on a cell before the cell starts to fail.
   • SLC typically consumes less power than any of the other drives discussed.
   • 15% of capacity is held over for failing cells. (I am unsure how accurate this percentage is as I have never found anyone to validate it from the flash manufacturers.)
   • For all the reasons mentioned above, SLC is considered the most reliable (It's also the most expensive $/GB of the flash technologies mentioned here).
   • For those EMC VNX customers out there, SLC drives are used in FAST Cache due to the number of writes the drive has to sustain over its lifetime.
   • IBM flash systems use SLC drives in their 710 and 720 models.

2). MLC (MULTIPLE LAYER CELL): Sometimes called cMLC drives for “Consumer Multiple Layer Cell.” These offer higher capacities and less performance than their SLC brothers. In this case, each cell stores 2 bits of data, or there are 2^2 or 4 operational states. Since each cell can store 2 bits opposed to SLC’s 1 bit, Simple math puts this technology at twice the capacity of SLC with the same quantity of components. Less cost/GB for you as a consumer.
   • Two bits per cell – Due to the voltage delta between the 4 operational states, these types of drives can experience higher error rates than SLC. In an effort to mitigate this, additional logic is necessary for each cell. The result is that cell access times are increased (specifically, write times).
   • Good access time: 100-200 micro seconds.
   • This is a good mid-tier flash technology
   • Approximately 10% of the capacity is held over for failing cells. (I am unsure how accurate this percentage is as I have never found anyone to validate it from the flash manufacturers.)
   • Pure Storage uses MLC drives in their Arrays. Pure states that the software Pure created limits the number of backend writes the MLC drives have to perform extending their lifespans.

3). EMLC (ENTERPRISE MULTIPLE LAYER CELL): These are built similarly to MLC drives with extra space reserved for failing cells and additional circuitry/logic to mitigate false positive errors caused by the delta in operations state voltages.
   • Very similar technology as MLC behind the scenes.
   • Good access time, 100-200 micro seconds.
   • Fits between SLC and MLC technology. eMLC was created to address failure rates of MLC.
   • Approximately 35% of the capacity in an EMLC drive is held for failing cells. This prolongs the lifespan of EMLC drives in high write environments. (I am unsure how accurate this percentage is as I have never found anyone to validate it from the flash manufacturers.)
   • EMC uses EMLC Flash technology in their VNX for FAST VP.
   • IBM uses eMLC flash technology in their FlashSystems 810, 820, and 840 products
   • NetApp used eMLC in their E-Series

(continued on page 7)
4). **TLC (TRIPLE LEVEL CELL):** TLC cells store 3 bits of data, or there are 2³ or 8 operational states. I have not found any enterprise storage manufactures that leverage TLC drives in their arrays. There is additional risk to error rates as the delta between voltages is nearly double that of MLC drives. I suspect we will eventually see these types of drives make their way into the enterprise flash market. Likely capacities will be x3 of SLC and 1.5x that of MLC when these drives find their way to the market.

- Started by Samsung some time ago. These drives have made their way to the market in PCs.
- Likely slower access times as there are 8 operational states per cell.

5). **X4 FLASH (TIMES 4):** This naming convention can be misleading. We as technologists have assumed that increments in times X are always better. In the case of X4 Flash, the 4 in X4 refers to the number of bits each cell can hold. In this case, an X4 flash drive has 2⁴ or 16 operational states. Likely will be x4 capacity of SLC and x2 capacity of MLC drives with the same number of components. Unsure when these drives will make their way to the market.

- Likely will be the highest capacity drives on the market.
- Likely to be the slowest in access times as there are 16 operational states per cell.
- I am unsure if this type of drive is on the market yet or not. I have not seen it out there.

There you go. Hope this helps you understand the differences between flash drives and which disk array manufacturers use which technologies. As always, feel free to reach out to us with any questions/comments at: storageguy@thinksis.com

You can also follow us on Twitter @SiSStorageGuy. See more at: http://thinksis.com/blog/infrastructure/storage/ssd-explained#sthash.bpeSE96v.dpuf

About the Author: Dean has designed, implemented and managed solutions around strategic partners and a host of smaller RAID/JBOD vendors to satisfy the storage-related business requirements for a variety of customers.
RAID, What’s the Best Option?

By: Quanexus

There are many options for choosing a RAID solution. It would take a lot of time to review all the options, but it is important to understand the most popular models and their pros and cons. RAID 0 is not typically used, but it is worth mentioning because it offers excellent performance (read and write capability) at the best price, but it lacks any form of fault tolerance. If all you are interested in is performance, this is the solution for you. I cannot recommend RAID 0 because it has no fault tolerance and doubles the chance of a total loss of data.

RAID 10 is my favorite; it provides all the performance of RAID 0 and includes fault tolerance by mirroring the RAID 0 drives to a second set of drives. This system is only 50% efficient and requires a minimum of four drives. RAID 10 provides the best read/write performance and offers a very high level of resiliency.

RAID 5/50 is a good solution if your application requires heavy data reads. It is typically implemented with three drives. With a three drive implementation, it is 66% efficient. The more drives you add to a RAID 5/50 solution, the more efficient it becomes, but the chance of a drive failure also increases. It offers good read performance but suffers if your application does heavy writing to the drive. If a drive fails in a RAID 5/50 solution, performance is greatly diminished because the system needs to calculate what was lost on the failed drive which creates a lot of overhead on the system. A lot of overhead is also required to rebuild the array.

RAID 6/60 is growing in popularity and is similar to RAID 5/50, but write performance is even worse than RAID 5 because it is using two disks worth of space for parity. It is also only 50% efficient like RAID 10. RAID 6/60 provides more resiliency than RAID 5.

If you can’t decide which RAID level to implement, I suggest RAID 10. The cost of hard drives is relatively inexpensive. On a smaller system with RAID 5, you would be looking at using three drives vs four drives in a RAID 10 solution. For the cost of a single enterprise class drive, it makes sense to step up to the faster solution, and should a drive fail, you won’t have to suffer the diminished performance of RAID 5.

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Technology First | April 2014
Open Source Project Management

By: Mark Wyatt, Ardent, Inc.

Feng Office allows businesses to manage project tasks, billing, documents, communication with co-workers, customers and vendors, schedule meetings and events, and share every kind of electronic information.

**BENEFITS OF FENG OFFICE FEATURES:**

Using Open Software means that you always have the freedom to choose. You can choose who will keep your software system up to date, who will administer the computers on which you run it, who will access its database. You can switch vendors with the confidence that you will have all the means necessary for making the easiest possible transition.

Feng Office is really simple to install and straightforward to configure. Installation and set up can be done in hours not days or weeks.

Feng Office provides an easy-to-use environment to organize documents and provide easy access to all shared documents. The security features provides peace of mind in securing sensitive documents to limited team members, while opening others up to a wider audience.

**ALTERNATIVE TO:**

Feng Office can be used as an alternative to several commercial applications such as: Microsoft Sharepoint, Microsoft Project, Microsoft Outlook or Basecamp.

**FEATURES:**

There are many great features available in the Feng Office application.

- Track every task, sub-task and milestone that is part of a service, project or activity. The system provides quick access to the tasks, grouped by status, priority, assigned person, and more. Define milestones for setting deadlines and improving project management.

- Automatically send an e-mail to notify a person who is assigned a task, or when there are any changes made to it. Information linked to a specific task is available at a single click. Create a template out of a set of tasks and subtasks, improving the adoption of standard procedures.

The calendar allows scheduling an agenda of events, milestones, tasks with deadlines, and meetings. It can be displayed daily, weekly or monthly. The schedule could be shared amongst the users who have correspondent privileges. You can see the schedule of events in general or specifically for each workspace or tag.

Feng Office allows you to store and share all types of documents. The system keeps record of the different versions, comments, and a controlled access to optimize the work of people who collaborate on a document. Text documents and presentations can be created or edited directly in Feng Office without the requirement of any additional software in your computer.

The contacts module manages the information of all organizations and people. The contact list can be filtered by a specific workspace, tags, or in a general manner.

The information can be quickly accessed using the integrated search engine, or it can be found using the filters of type, tags or workspaces.

For a library of Open Source software go to opensourceohio.net

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There are many different relational database management systems (RDBMS) out there. You have probably heard about Microsoft Access, Sybase, and MySQL, but the two most popular and widely used are Oracle and MS SQL Server. Although there are many similarities between the two platforms, there are also a number of key differences. I will be taking a look at several in particular, in the areas of their command language, how they handle transaction control and their organization of database objects.

**LANGUAGE:**

Perhaps the most obvious difference between the two RDBMS is the language they use. Although both systems use a version of Structured Query Language, or SQL, MS SQL Server uses Transact SQL, or T-SQL, which is an extension of SQL originally developed by Sybase and used by Microsoft. Oracle, meanwhile, uses PL/SQL, or Procedural Language/SQL. Both are different “flavors” or dialects of SQL and both languages have different syntax and capabilities. The main difference between the two languages is how they handle variables, stored procedures, and built-in functions. PL/SQL in Oracle can also group procedures together into packages, which can’t be done in MS SQL Server. In my humble opinion, PL/SQL is complex and potentially more powerful, while T-SQL is much more simple and easier to use.

**TRANSACTION CONTROL:**

Another one of the biggest differences between Oracle and MS SQL Server is transaction control. For the purposes of this article, a transaction can be defined as a group of operations or tasks that should be treated as a single unit. For instance, a collection of SQL queries modifying records that all must be updated at the same time, where (for instance) a failure to update any single records among the set should result in none of the records being updated. By default, MS SQL Server will execute and commit each command/task individually, and it will be difficult or impossible to rollback changes if any errors are encountered along the way. To properly group statements, the "BEGIN TRANSACTION" command is used to declare the beginning of a transaction, and either a COMMIT statement is used at the end. This COMMIT statement will write the changed data to disk, and end the transaction. Within a transaction, ROLLBACK will discard any changes made within the transaction block. When properly used with error handling, the ROLLBACK allows for some degree of protection against data corruption. After a COMMIT is issued, it is not possible to roll back any further than the COMMIT command.
Within Oracle, on the other hand, each new database connection is treated as a new transaction. As queries are executed and commands are issued, changes are made only in memory and nothing is committed until an explicit COMMIT statement is given (with a few exceptions related to DDL commands, which include “implicit” commits, and are committed immediately). After the COMMIT, the next command issued essentially initiates a new transaction, and the process begins again. This provides greater flexibility and helps for error control as well, as no changes are committed to disk until the DBA explicitly issues the command to do so.

**ORGANIZATION OF DATABASE OBJECTS:**

The last difference I want to discuss is how the RDBMS organizes database objects. MS SQL Server organizes all objects, such as tables, views, and procedures, by database names. Users are assigned to a login which is granted accesses to the specific database and its objects. Also, in SQL Server each database has a private, unshared disk file on the server. In Oracle, all the database objects are grouped by schemas, which are a subset collection of database objects and all the database objects are shared among all schemas and users. Even though it is all shared, each user can be limited to certain schemas and tables via roles and permissions.

In short, both Oracle and SQL Server are powerful RDBMS options. Although there are a number of differences in how they work “under the hood,” they can both be used in roughly equivalent ways. Neither is objectively better than the other, but some situations may be more favorable to a particular choice. Either way, Segue can support these systems and help to make recommendations on how to improve, upgrade, or maintain your key mission-critical infrastructure to make sure that you can keep your focus on doing business.
If you’re an Office 365 user, did you know that you already have SharePoint at your fingertips? With SharePoint, you can improve internal communication, reduce document clutter, increase document availability, and easily track shared tasks. Since Office 365 is a cloud-based solution, all of these features are available to you regardless of your location. Below are three easy to implement solutions that are built-in to this incredible business platform.

**ANNOUNCEMENTS:**

Announcements are one component of SharePoint that make internal communication easier to manage. You can use this feature to communicate important events, post news, or share updates with your team members. This is helpful to keep everyone on the same page in a fast-paced business environment. With Announcements, there are ways to make sure that each member sees new updates as they are posted and you can also set expiration dates so that announcements disappear automatically.

**DOCUMENT LIBRARIES:**

SharePoint contains document libraries allowing you to upload and store your critical business documents. These documents then become accessible to you when and where you need them. With Document Libraries, you can easily share and co-author content with team members, consolidate space for document storage, and define retention and disposal schedules. Document Libraries can also help satisfy disaster recovery/compliance requirements.

**TASK LISTS:**

Task lists are also available with SharePoint. This component is great when you have more than one person working on a project. Tasks can be assigned to individuals and updated as they are completed or in progress. This also gives project managers a real-time view using graphical, colored project dashboards that give quick insight in the project tasks, timelines, and milestones.

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Why adopt **AGILE**?

1. **Faster time to market**
   Clients are fed up with 18 month delivery cycles that often deliver the wrong products to market. Agile allows you to become better at getting your working product out the door faster.

2. **Early ROI**
   A team decided to give Agile a try and delivered the results of just their first sprint. The Product Owner’s reaction: “It makes a real difference to the business. I can show the output of this sprint to an external customer and sell business based on this.”

3. **Feedback from real customers**
   Clients report that over 50% of the features built have never been used. What if we could take all that and focus it on building stuff they’ll actually use? How much does building the wrong product slow your team down?

4. **Building the right products**
   Even if you are building the exact features that customers are asking for, incremental delivery helps to build them the way customers will actually use them. Agile helps the customer and the team converge on the best possible outcome.

5. **Early risk reduction**
   Agile doesn’t treat risk as a separate area to be managed... agile is risk management. Deliver early and get feedback, reducing the risk of building the wrong product.

**AGILE FUNDAMENTALS OVERVIEW**

This class gives an end-to-end overview of Agile Fundamentals (concepts, values, principles and practices) that teams need to understand in order to help them deliver value to customers faster and with less risk than traditional project management. The overview will cover what agile really means and the relationship between various agile terminology. This workshop shares the latest techniques and best practices from Agile/Scrum, Lean Software development and Kanban.

**REGISTRATION INFORMATION**

- **April 10, 8:00am-noon**
  - $15 (breakfast included)
  - Miami Valley Research Park
  - 1900 Founders Dr., Suite 100
  - Kettering, Ohio 45420

- **April 11, 8:30am-12:30pm**
  - $15 (breakfast included)
  - Courseview Campus
  - 5386 Courseview Dr.
  - Mason, Ohio

**A $600 per person value!**

To learn more about these classes:
- Call 937.252.9787
- or go online to http://bit.ly/1iwh8HF

**UPCOMING COURSES FOR INFORMATION TECHNOLOGY**

- **Salesforce.com for Sales Representatives**
  - 04/22, 8:30am-4:30pm, $899

- **Agile and Team Scrum Workshop**
  - 04/24-04/25, 8:00am-5:00pm, $1,100

- **Adobe ColdFusion Crash Course**
  - 04/28-05/02, 8:30am-4:30pm, $895

- **CompTIA Security+ Module 3 for CEU’s**
  - 05/01, 8:00am-12:00pm, $199

- **Professional Scrum Master Certification Training**
  - 05/15-5/16, 8:00am-5:00pm, $1,295

- **CompTIA Security+ Module 4 for CEU’s**
  - 06/05, 8:00am-12:00pm, $199

- **Scaled Agile Framework Leading SAFe Certification Training**
  - 06/19-06/20, 8:00am-5:00pm, $1,195

- **Professional Scrum Foundations Certification Class**
  - 06/23-06/24, 8:00am-5:00pm, $1,295

- **Professional Scrum Product Owner Certification Training**
  - 06/26-06/27, 8:00am-5:00pm, $1,295

All classes are held at Miami Valley Research Park, 1900 Founders Dr., Kettering unless otherwise noted.

Call 937-252-9787 or visit workforce.sinclair.edu for more information.
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