K2's AI And Other Technologies You Need To Know

Tommy Stephens

CPA from Woodstock, Georgia

Partner, K2 Enterprises

Thirty-nine years public accounting & private industry experience

BSBA (Accounting) Auburn University

MS (Finance) Georgia State University

Please contact me: tommy@k2e.com

Follow me on X: @TommyStephens

Learning Objectives

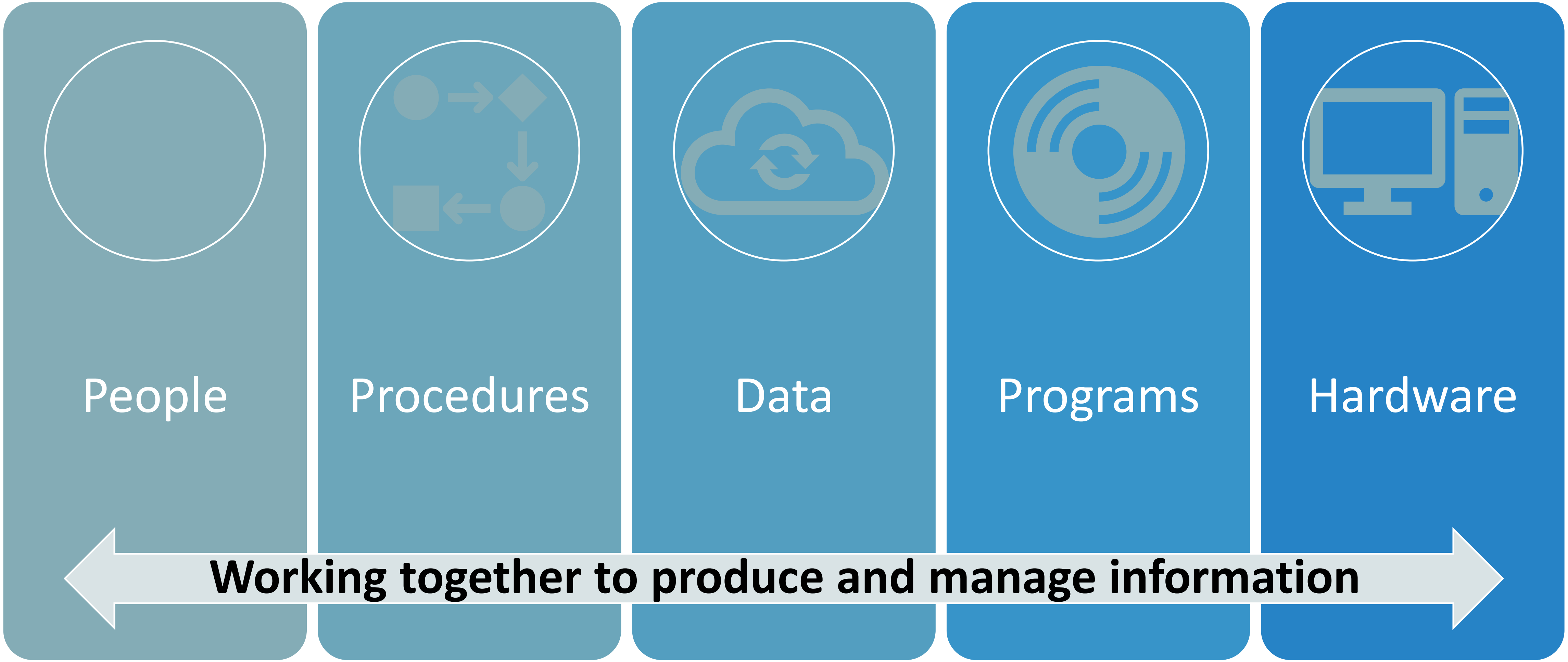
Identify examples of key emerging technologies and the associated benefits and risks

Specify use cases for AI in business environments

List examples of security issues and how potential solutions

Implement effective collaboration options

First, A Holistic View Of Technology



The Basics

TECHNOLOGY BLOCKING AND TACKLING

END-USER HARDWARE, INCLUDING WINDOWS 11 AND WINDOWS 12

Hardware Trends & Developments

- Graphics processors (GPUs) are everywhere
- AI and ML are here to stay
- Performance and efficiency improvements provide better price/performance ratios
- Improved battery life for road warriors
- Display technologies continue to improve
- Other than faster processors, not much new on the server front

These Trends Mean

- Many desktops and laptops are outdated compared to newer models currently available
- Only marginal improvements seem to be happening with servers and local storage, but for how long will these technologies be relevant
  - For how much longer will you really need a server?

K2's Recommended Configurations

PC Buyer	Mac Buyer
• Windows 11, Microsoft 365	• MacOS, Microsoft 365
• Intel Core i7-i9, AMD Ryzen 5-9	• M1 PRO/MAX ARM (Expect M2)
• Dedicated Graphics	• Dedicated Graphics
• At least 16GB RAM	• At least 16GB of RAM
• 1TB Or Greater SSD	• 1TB Or Greater Solid-State Drive
• Thunderbolt 4	• Thunderbolt 4

Windows 11 Fundamentals

- **Windows 11 is the most recent release** in the Windows operating system lineage, and Windows 12 is around the corner
- Windows 11 **builds on the strengths of Windows 10** but provides improvements in several critical areas, including **security**, **performance**, and **usability**
- Unfortunately, **not all Windows 10 users will be able to make the upgrade** to Windows 11
- Similarly, **Windows 12 (when it arrives)** will add marginal security upgrades and promises to be AI-ready

Key Security Features

- Windows 11 security adopts many of the principles found in **Zero Trust Security Models (ZTSMs)**
- As implied by the name, **ZTSMs provide a more secure environment than legacy security environments**
- Four key principles of ZTSMs include
  - **Endpoint security**
  - **Segment networks**
  - **Least privilege controls**
  - **Identity verification**

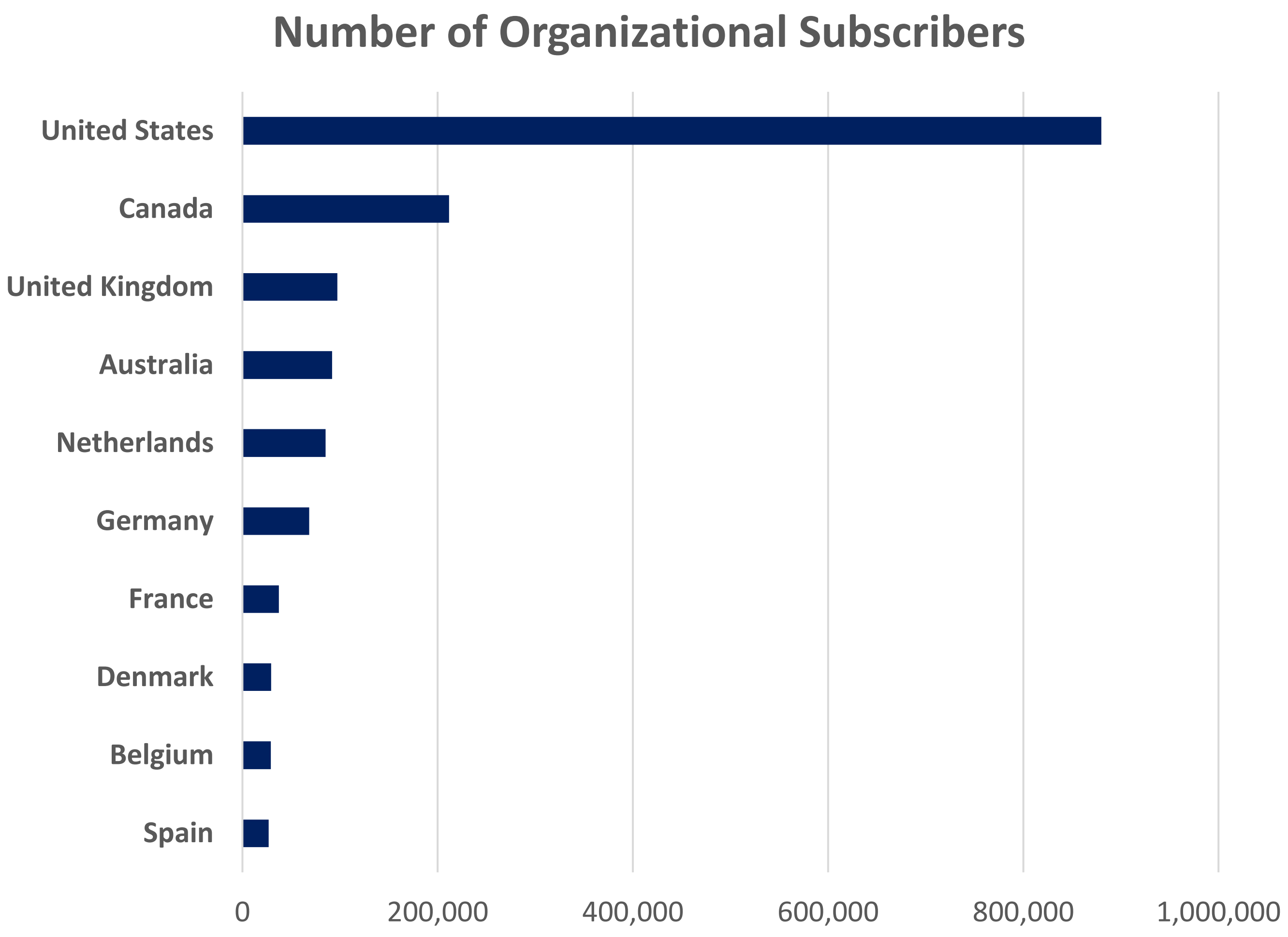
Must You Upgrade? You Decide

- **Absolutely not!**
- **It's your computer and you can run whatever operating system you choose**
- However, **Microsoft is not required to support an operating system – such as Windows 10 – indefinitely**
- And if you choose to use an unsupported operating system, then you may **miss out on tech support, feature improvements, bug fixes, and security updates**
- **Windows 10 will not have tech support after 10/14/2025!**

SOFTWARE AND SERVICES

Software Subscriptions Rule The Day

- Software **subscriptions rule** the day!
- To illustrate, according to Enlyft, **approximately 1.27 million US <u>companies</u> and almost 100k Canadian <u>companies</u> use Microsoft 365** subscriptions



But It’s Not Just 365!

- Almost all software publishers are encouraging – even *<u>mandating</u>* in some cases – **subscription models**
  - Consider, for instance, Intuit’s mandate of QuickBooks Desktop subscriptions beginning with QuickBooks Desktop 2022
  - Or Adobe’s push to Acrobat DC
- Why the shift? At least three drivers…
  - **Financial** – stable, predictable, recurring cash flows
  - **Tech Support** – can reduce the number of versions requiring support
  - **New Features** – can stream new features to users easily (if cloud)

Productivity Software

- Microsoft 365 E3 or E5
  - $**8**, $**33.75**, or $**54.75**/user/month depending on the subscription plan
- Zoho One
  - $**37** or $**90**/user/month
  - Apps have more variety than what you get with Google/M365
- Google Workspace
  - $**7**, $**14**, or $**22**/user/month

Microsoft 365

ZOHO One

Google Workspace

WHAT’S THE VALUE PROP FOR SUITES LIKE M365, ZOHO ONE, & GOOGLE WORKSPACE?

Are **BIG** Changes Coming For QuickBooks And, If So, When?

- The Desktop product has been a subscription-only service dating back to 2022
- In 2024, **Intuit stopped selling new subscriptions to the desktop product**…only renewals, except for Enterprise
- That action has led many to question the longevity of QuickBooks Desktop, a pioneer in accounting software for small businesses
- Note that presently, **approximately 7 million subscribers use QuickBooks Online**

No Matter The App Or Service…

- Of increasing importance to businesses of all sizes is the ability – or lack thereof – to **integrate your apps and services to others, including those published by other vendors**
- In many cases, no single app or service provides all the utility necessary to get the job done
- Therefore, integrations with other tools will be necessary…**ensure that you don't lock you and your team into a silo** from which integration is challenging or, perhaps, not available at all

CONNECTIVITY MAY BE THE MOST IMPORTANT ISSUE OF THE DAY!

Connectivity – What's Important?

SPEED

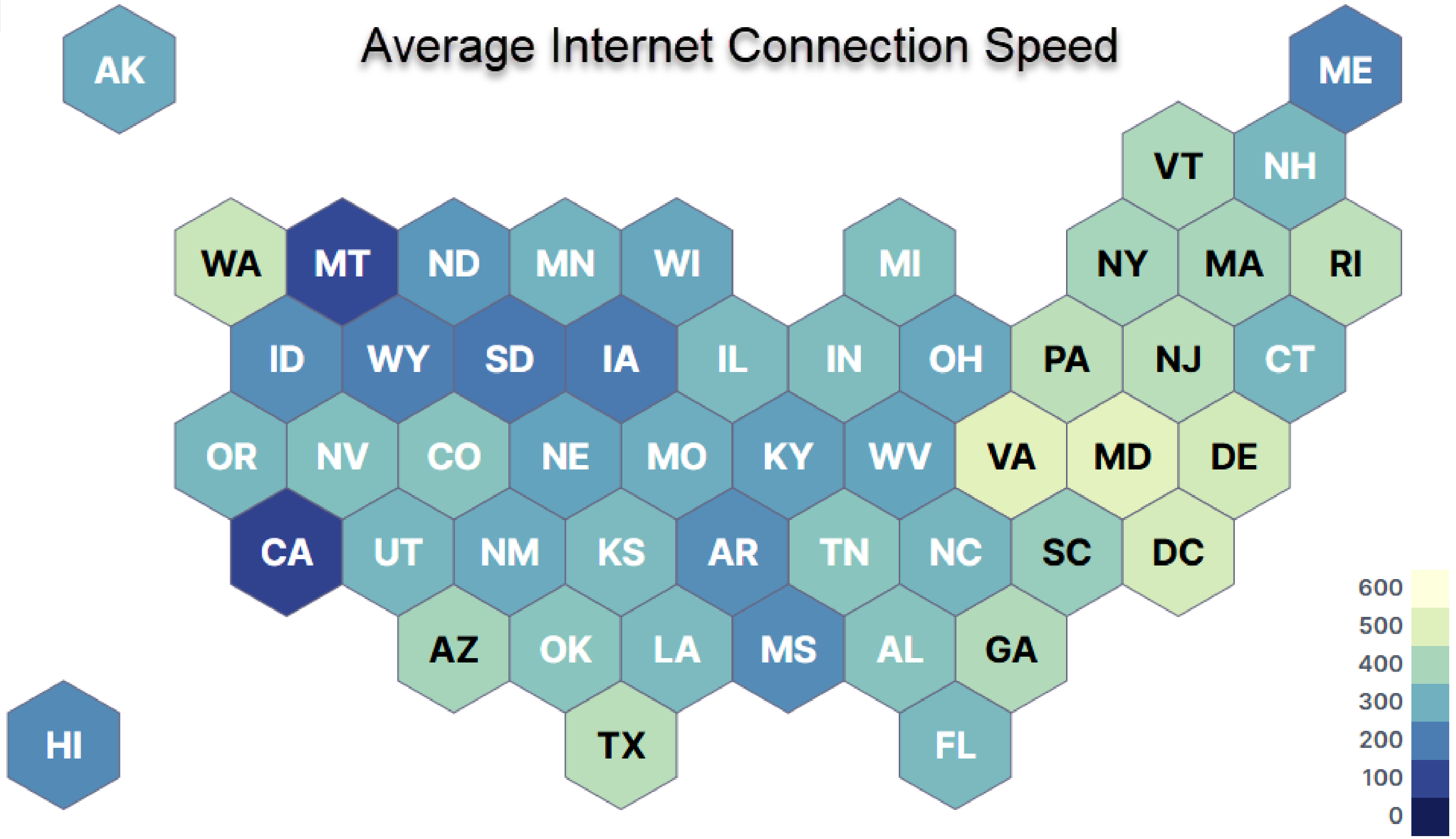
AVAILABILITY

RELIABILITY

SECURITY

PRICE

Speeds Are Good For Most Users



View the interactive version at https://k2e.fyi/37wPGfR or by using the QR code below

Unfortunately, Connectivity Is Not Guaranteed For Everyone

- Fast and reliable connections are, unfortunately, **not to be taken for granted, particularly in remote, rural areas**
  - Even in some urban and suburban areas, you will run into pockets of “dead spots”
- Plus, **don’t forget about a potential “digital divide”** created when lower income individual families struggle to afford consistent, reliable, high-speed connections

More Traditional Internet Sources

- According to the FCC, **over 85% of all Americans have access to broadband connectivity**
  - However, **in rural areas that number is only 61%**, compared to 90% in urban areas
- As of January 2025, **56.5% of Americans have access to in-home fiber internet connections, according to** https://fiberbroadband.org

With Internet Access, Focus On…

Wi-Fi 7	WPA3

• Wi-Fi 6E improved Wi-Fi connectivity by **taking advantage of the 6Ghz band**
• **Wi-Fi 7 extends that improvement with even better overall performance**
	• **WPA-3 is the latest security protocol** for Wi-Fi connectivity, providing
	  • More reliable password protection
	  • Improved network security
	  • Safer connections on open networks

Today’s Most Significant Security Risks

SECURITY FIRST!

A Sampling Of Risks…

1. Ransomware
2. Phishing attacks, including “spearphishing” incidents
3. Credential compromises
4. Poorly configured end-user devices
5. Misconfigured organizational security devices
6. Lack of appropriate security policies and plans in place
7. Inadequate team member training to policy objectives
8. Remote work environments
9. Poor backup strategies
10. Continuing to use legacy hardware and software

Data Security

- With **EVERY** technology you use or implement, security considerations **MUST** be addressed
- The good news here is that the fundamentals still work!
  - Strong authentication controls, including multi-factor authentication
  - Network segmentation
  - Sound backup polices and procedures that you test periodically
  - Windows-based tools and services, such as AppLocker and BitLocker
  - Zero-Trust security models
- Remember, the key is multi-layer security models!

What About Privacy?

- In an increasingly connected world, **all our personal information is under siege**, and there are few boundaries yet to be crossed
- Your **browsers, search engines, the web sites you visit, and the merchants with whom you do business all represent potential exposure points** of sensitive and personal data
- **As individuals, we *<u>should</u>* be concerned** about this issue
- **At a corporate level, we *<u>must</u>* be concerned because of privacy laws and regulations**

Privacy Versus Security

What Is The Difference?

- Some view **privacy** and **security** as the same issue
- Although similarities exist, **these topics are, indeed, different**
- For today’s discussion, we will view **privacy as the right to control your personal information and how others use it**
- On the other hand, we will view **security as the methods and techniques used to protect your information**

Privacy And Online Meetings

- Is there a storm brewing with privacy and online meetings?
  - ***Maybe!***
- Do you announce to all participants that your meetings are being recorded?
- What about situations where some participants participate from two-party consent states?
  - Failing to announce that a meeting is being recorded could potentially run you afoul of state privacy laws

COLLABORATION TOOLS

Teams Remains A Keystone Solution

1. Teams as the "uber" **communications tool**
2. **Co-authoring and collaboration**
3. Adding **Guest** and **External team members**
4. **Deploying apps** in Teams
5. **Security and compliance**
6. **Multi-platform and multi-operating system**
7. Sync **SharePoint Online data to local drives**

Teams Origins

- Teams helped fill a void in voice, video, and communications technology for organizations of all sizes
- Further, the integration of communications capabilities with traditional applications provided Teams with an end-to-end platform that many of its competitors did not and still do not have
  - Arguably, **Google**, **Salesforce** (**Slack**), and **Zoho** are Teams biggest competitors in terms of overall functionality
- Today, Teams boasts over 320 million daily active users, compared to 38.8 million for Slack

Source: https://www.demandsage.com/

THE INCREASING ROLE OF AUTOMATION

What Makes Automation Effective?

- "Hands-off," low maintenance
- Faster than manual approaches
- Minimal incremental expense
- Accurate
- Easier than alternatives
- Makes the impractical possible
- Intuitive for users, requiring little training

What Is Accounting Automation?

- **Accounting automation is the process of automating many of the rote, repetitive tasks** often performed in accounting departments or accounting firms
- While some view this as a new topic, in fact, **it dates to 1640 when Blaise Pascal introduced the adding machine!**
- However, with recent advancements in technology, **accounting automation is a viable option for many tasks**

Examples Of Tasks To Automate

Data entry, such as scanning vendor bills into accounts payable

Automatically **routing documents for approvals**

Matching documents, such as A/P bills to purchase orders to receiving reports

Using smartphones to take pictures of T&E employee expense reporting

And, of course, **bank feeds**

Accounting Automation Benefits

1. Time savings
2. Improved margins
3. Better accuracy
4. Quicker turnaround times
5. Improved customer/client service
6. Helps to “upskill” team members
7. Real-time or very near real-time decisions
8. Improved team member availability and accessibility

DATA ANALYTICS & BUSINESS INTELLIGENCE

Data Analytics/Business Intelligence

- Many professionals use these two terms interchangeably, and that’s understandable because these are related fields
- However, it is important to note that – although related – Data Analytics and Business Intelligence are **two distinct disciplines**, used for **different – yet, often complementary – purposes**
- In modern-day business, both fields have emerged as being **all but necessary in most successful organizations**

What Is Business Intelligence?

Business Intelligence is a set of procedures, tools, and technologies working in concert to transform raw data – potentially vast quantities of raw data – into meaningful information. Managers can use this information to help make decisions and prescribe courses of action that optimize organizational performance.

What Is Data Analytics?

Data analytics is a tool used by BI. More specifically, business professionals use data analytics tools to build data analyses, forecasts, and projections. Data analytics focuses on identifying and managing data that can be useful in identifying ***what happened, why it happened, what will happen in the future, and how we can improve****.*

Data Analytics Answers Four Questions

WHAT HAPPENED?

WHY DID WE ATTAIN A SPECIFIC SET OF RESULTS?

WHAT WILL HAPPEN IN THE FUTURE?

HOW CAN WE ACHIEVE BETTER PERFORMANCE?

“BUT I’M AN ACCOUNTANT, NOT A DATA ANALYST”…THINK AGAIN!

Business Intelligence Platforms

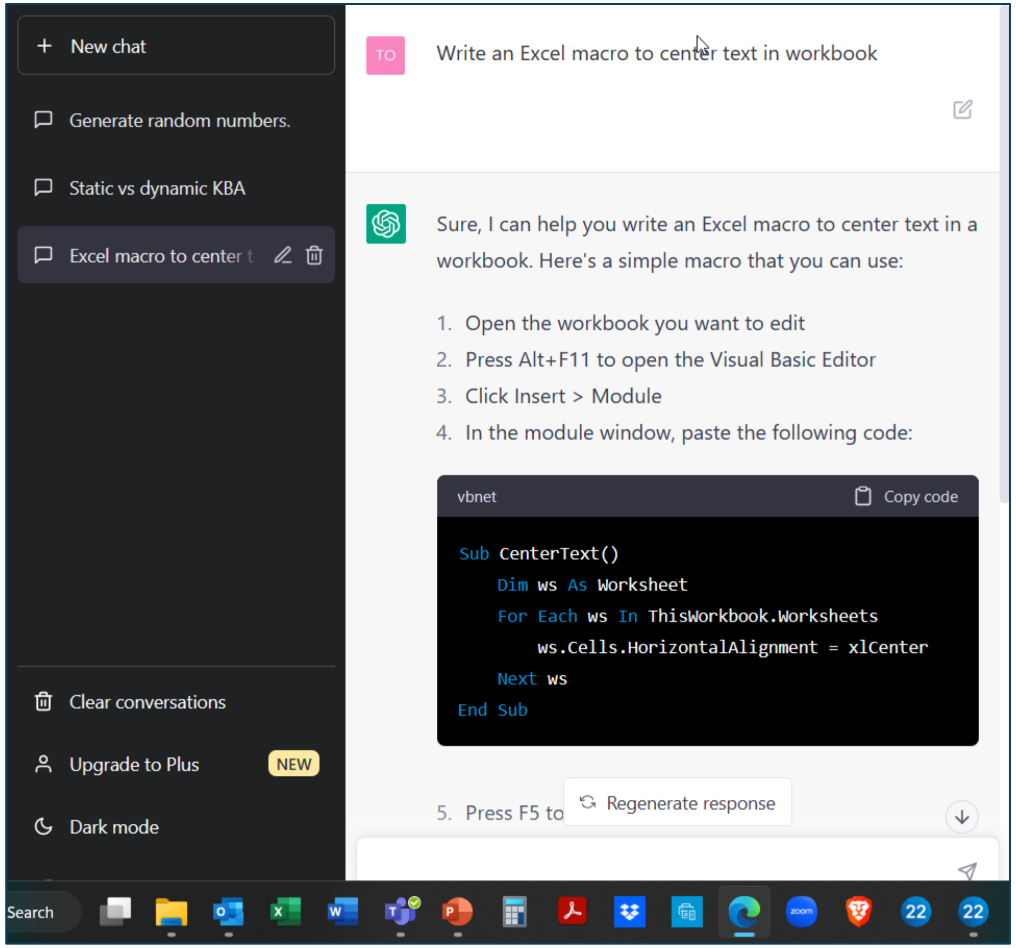
- Many good, inexpensive tools now exist, including
  - Power BI
  - Zoho Analytics
  - Salesforce (Tableau)
  - Qlik
  - Google
  - Domo
- The real key here is training team members to use the tools effectively…fortunately, that’s a pretty easy lift

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) Defined

- Computer science defines AI research as the study of “intelligent agents”: any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals
- Colloquially, the term “artificial intelligence” is used to describe machines that mimic “cognitive” functions that humans associate with other human minds, such as “learning” and “problem-solving”

ChatGPT…One Of The Stars Of The AI Show!



- ChatGPT now allows everyone to access a useful AI platform, although many would argue that the tool is a “search engine on steroids”
- Nonetheless, ChatGPT is likely showing us the near-term future of AI

Other Popular AI Platforms

- **Claude**
  - Claude is Anthropic's generative AI platform, available in various iterations, including a free plan, one priced at $18 per user, per month, one priced at $25 per user, per month, and a corporate plan
- **Copilot**
  - Microsoft's entrant into the market is Copilot
  - The business-oriented of versions of Copilot ($30 per month) integrate deeply with Microsoft 365 data and are easy to use in concert with tools such as Excel, Outlook, Word, and PowerPoint
- **Gemini** is Google's offering and is available at no charge or on a paid subscription at $20 per user, per month

What Is Generative AI?

- Generative AI – including tools such as **ChatGPT**, **Claude**, **Copilot**, and **Gemini** – creates content based on the *prompts* you issue
- For example, we could prompt an AI tool to "*provide a summary of tax law changes affecting not-for-profits in 2025*", and the AI tool would reply accordingly
- Similarly, we could ask an AI tool to analyze a set of financial statements for noteworthy trends, generate an amortization schedule, draft a footnote for lease accounting disclosures and the AI tool would complete these tasks for us

Generative AI Depends On LLMs

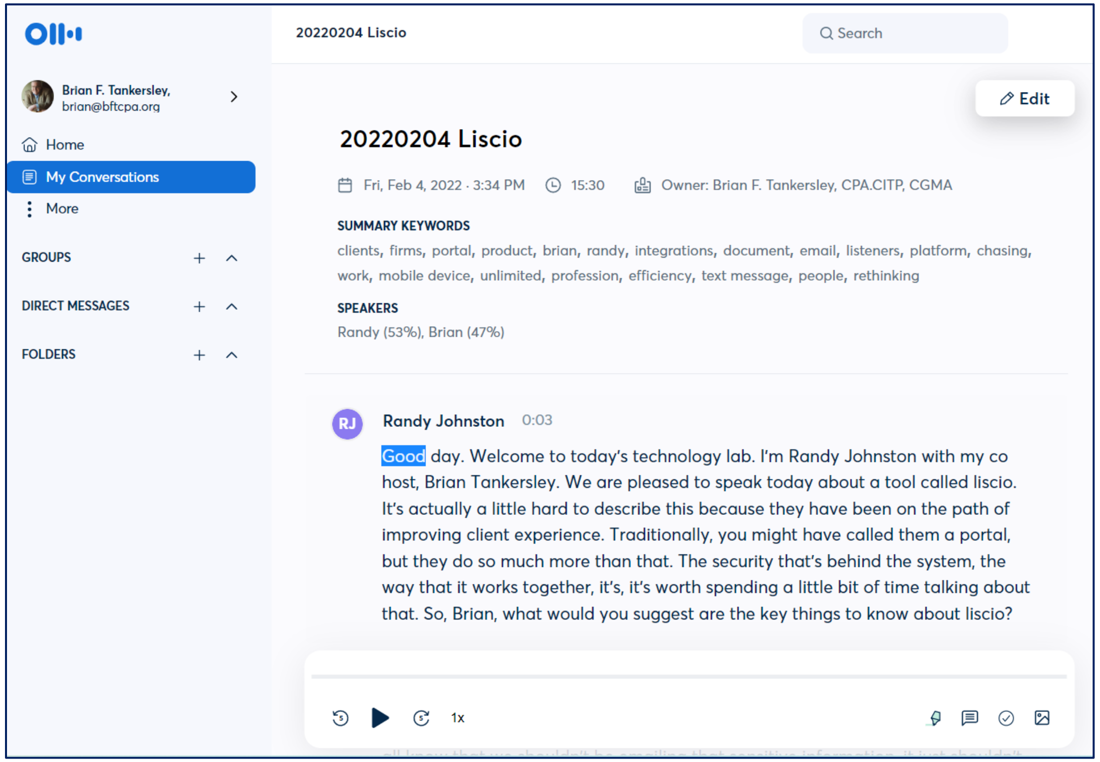
- Q. Where do generative AI tools find their responses to the questions you ask of them?
- A. GenAI tools build their responses to your prompts by pulling together content from **Large Language Models** (LLMs)
  - Think of an LLM as a large – very large – database
  - When you issue a prompt, your AI tools creates the response based on the data in the LLM
  - Thus, the more (accurate) data that exists in the LLM and the better the LLM is “trained,” the better and more accurate result you will receive from your AI platform

LET'S GO INTO DEMO MODE AND SEE SOME EXAMPLES…

Current Business AI Examples

Many services use AI to enhance knowledge work

- Otter.ai audio transcription
- Grammarly's writing assistance
- Microsoft Word's inclusive language checker
- Optical character recognition algorithms used by Zoho Expense, Dext, Corpay One, and others



Otter's translation service uses AI to identify words and speakers

Five Key Strategies For Tech Success

- Stick with proven vendors, products, and services
- Implement and utilize Zero Trust Security Models
- Recognize the Cloud for what it is and the benefits it offers
- Embrace AI, but do so with respect for the uncertainty of it
- Train your team! Train them again! And train them yet again!

tommy@k2e.com

THANKS FOR PRIVILEGE OF SHARING THIS INFO…I HOPE YOU FOUND IT HELPFUL!