



We'll get you there.

CPAs | CONSULTANTS | WEALTH ADVISORS

The Coming Wave of Innovation – Demystifying Digital and AI Advancements

June 5, 2025



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Session CPE Requirements

- You need to attend 50 minutes to receive the full 1 CPE credit.
 - There will be 4 polling questions throughout the presentation. You must respond to a minimum of 3 to receive the full 1 CPE credit.

****Both requirements must be met to receive CPE credit****



Learning Objectives



Recall the latest advancements in digital and AI strategies, and how they can enhance both patient care and operational processes



Identify the challenges and benefits of using AI



Recognize how to integrate these technologies and apply digital strategies in your organization

Introductions



Tyler Coher
Director
Data Analyst
Health Care and Life Science
Indianapolis, IN



Alex White, PhD
Principal
AI, Data and Automation
Health Care and Life Science
Indianapolis, IN



Seth Wilson, CPA
Principal
Data and Automation
Health Care and Life Science
Worcester, MA



Ryan Bjerke, MBA
Principal
Strategy & Innovation
Health Care and Life Science
Minneapolis, MN



Industry Experience: Health Care and Life Science

CLA currently serves more than **10,200 health care clients** which include:

3,200+

Senior living providers including nursing facilities, CCRCs, assisted living facilities, HUD housing, etc.



200+

Home care, hospice, and other community-based providers



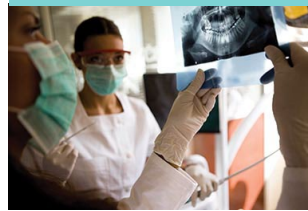
900+

Hospitals and health systems, including approximately **80** critical access hospitals



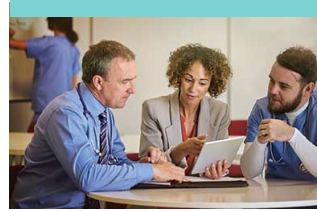
5,800+

Physicians, dentists, and medical practices



150+

Other health care entities (therapy providers, managed care entities, health care management companies, mental health)



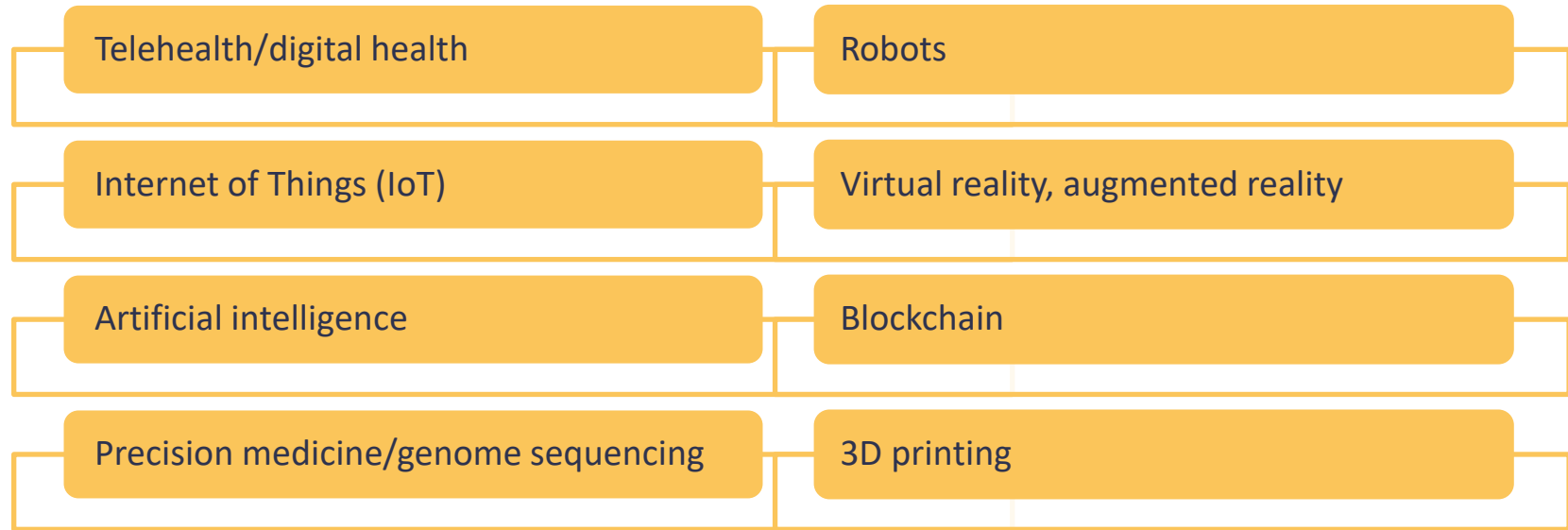
“We are experiencing 100 years of
innovation in the coming 6-8 years.”

— Satya Nadella
CEO of Microsoft



New Ecosystem Industry 4.0

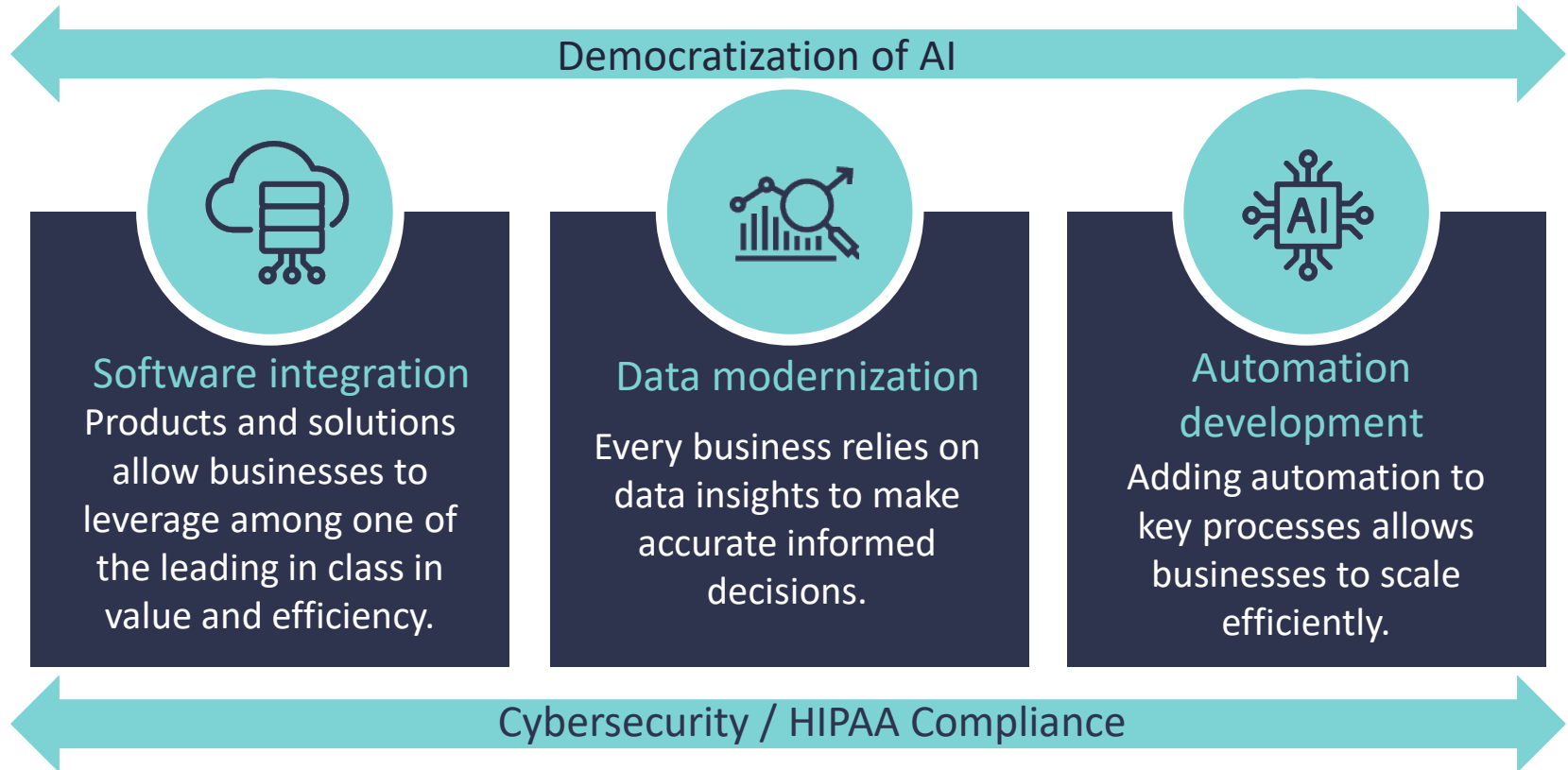
Advances and innovations in the following are helping drive this future ...



And many more...



Modernizing Health Care



Five Common Challenges in Health Care



Lack of
real-time
data



Siloed
systems
not talking
to each
other



Data
governance



Lack of
digital and AI
strategy



Cybersecurity
HIPAA
compliance

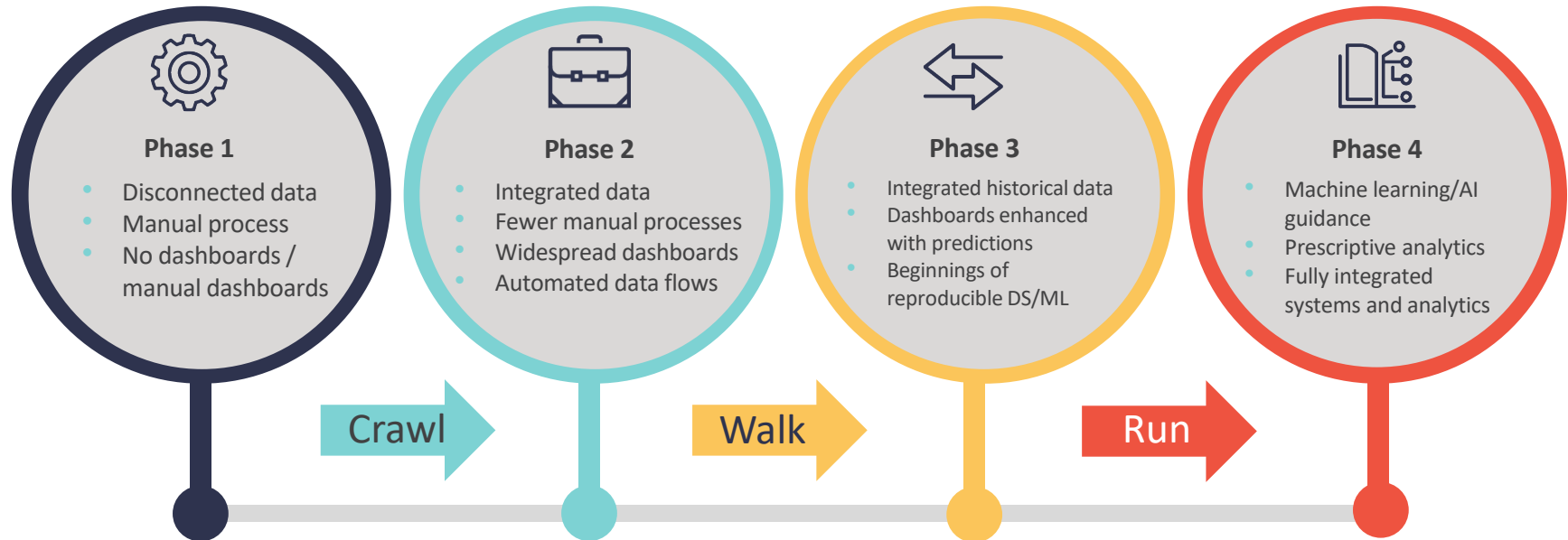


Do any of these resonate with your organization?



The Digital Transformation Journey

Where are you on the journey?





How are AI and Digital Applied in Health Care?

Use Cases



Simplified: Artificial Intelligence



- IT systems that sense, comprehend, act and learn.
- “Intelligence” demonstrated by software with the ability to depict and mimic human brain functions.

What Is AI Again? Key Features and Dependencies

Feature	Dependency	
	Human	A.I.
Vision / sight	Eyes	Cameras
Hearing / sound	Ears	Microphones
Touch / measure	Nerves	Sensors
Learning	Brain	Data (Storage and processing)
Actions	Freewill	Prompt, trigger, or schedule



AI: A Few HCLS Use Cases

Machine learning/generative AI

- Think Chat GPT. These are Large Language Models trained on massive amounts of data to respond to prompts
- A few simple examples: could be used to draft prior authorization letters, respond to patient health care or disease questions (via chatbots, patient portal)

Natural language processing

- An approach to AI focused on understanding language and conversation (Ambient listening, voice to text, AI Scribe)
- Major use case now relates to clinical documentation
- NLP is being used with ambient listening to craft the clinical note during that patient visit, note then reviewed by provider before it goes into the medical record
- Electronic health record (EHR) companies are already working to embed these capabilities into their systems

Machine learning

- Revenue cycle automations
- Predictive analytics—to search for patterns/trends in your data and make recommendations. For example, which patients are more likely to readmit
- Surfacing trends/insights from disparate data sets
- Reviewing medical images (MRIs, X-rays) to detect diseases (like cancers)

Computer vision

- A way for computers to decipher or “see” visual data around them
- Self-driving cars are most recognizable example of computer vision AI today
- In health care, autonomous drones could deliver prescription drugs to a patient’s home
- Clinical example is use of smart glasses to help diagnose retinal diseases or dermatological conditions





How are AI and Digital Applied to the Business of Health Care?

Use Cases



Invoice Automation

CONTOSO LTD.

Contoso Headquarters
123 456th St
New York, NY, 10001

Microsoft Corp
123 Other St,
Redmond WA, 98052

BILL TO:
Microsoft Finance
123 Bill St,
Redmond WA, 98052

SHIP TO:
Microsoft Delivery
123 Ship St,
Redmond WA, 98052

SERVICE ADDRESS:
Microsoft Services
123 Service St,
Redmond WA, 98052

INVOICE

INVOICE: INV-100
INVOICE DATE: 11/15/2019
DUE DATE: 12/15/2019
CUSTOMER NAME: MICROSOFT CORPORATION
SERVICE PERIOD: 10/14/2019 – 11/14/2019
CUSTOMER ID: CID-12345

SALESPERSON	P.O. NUMBER	REQUISITIONER	SHIPPED VIA	F.O.B. POINT	TERMS
	PO-3333				

DATE	ITEM CODE	DESCRIPTION	QTY	UM	PRICE	TAX	AMOUNT
3/4/2021	A123	Consulting Services	2	hours	\$30.00	\$6.00	\$60.00
3/5/2021	B456	Document Fee	3		\$10.00	\$3.00	\$30.00
3/6/2021	C789	Printing Fee	10	pages	\$1.00	\$1.00	\$10.00

SUBTOTAL	\$100.00
SALES TAX	\$10.00
TOTAL	\$110.00
PREVIOUS UNPAID BALANCE	\$500.00
AMOUNT DUE	\$610.00

THANK YOU FOR YOUR BUSINESS!

REMIT TO:
Contoso Billing
123 Remit St
New York, NY, 10001

- AI can reduce manual effort
- AI can speed up efforts considerably
- Extract key fields
- Human review
- Map and approve



What is Microsoft Copilot?

Processing and orchestration engine to combine the power of LLMs, including GPT-4, with Microsoft 365 apps and your business data

Available in:

- Outlook
- Teams
- Word
- PowerPoint
- Excel



Post Acute Referral Admissions With AI

- Aligning:
 - Right place, right time, right care
- Medical record extraction
 - Payer source
 - Primary diagnosis
 - BMI
 - Medications
 - Mental health status
- Accept, reject, prepare

Discharge Note

Riverside General Hospital
General Medicine
1234 River Street, Metropolis, NY 1234 Phone: (555) 123-4567

Patient Information:

- Name: John Doe
- Date of Birth: January 15, 1980
- Medical Record Number: 123456789

Admission Date: June 10, 2024

Discharge Date: June 17, 2024

Attending Physician:

- Name: Dr. Jane Smith
- Department: General Medicine

Reason for Admission: John Doe was admitted to the hospital for the management of acute pneumonia.

Hospital Course: Upon admission, the patient presented with fever, cough, and shortness of breath. Initial chest X-ray revealed infiltrates consistent with pneumonia. The patient was started on broad-spectrum antibiotics and received supportive care, including intravenous fluids and oxygen therapy.

Over the course of the hospital stay, John Doe showed significant clinical improvement. Fever resolved, respiratory symptoms lessened, and follow-up chest X-ray showed marked improvement in infiltrates.

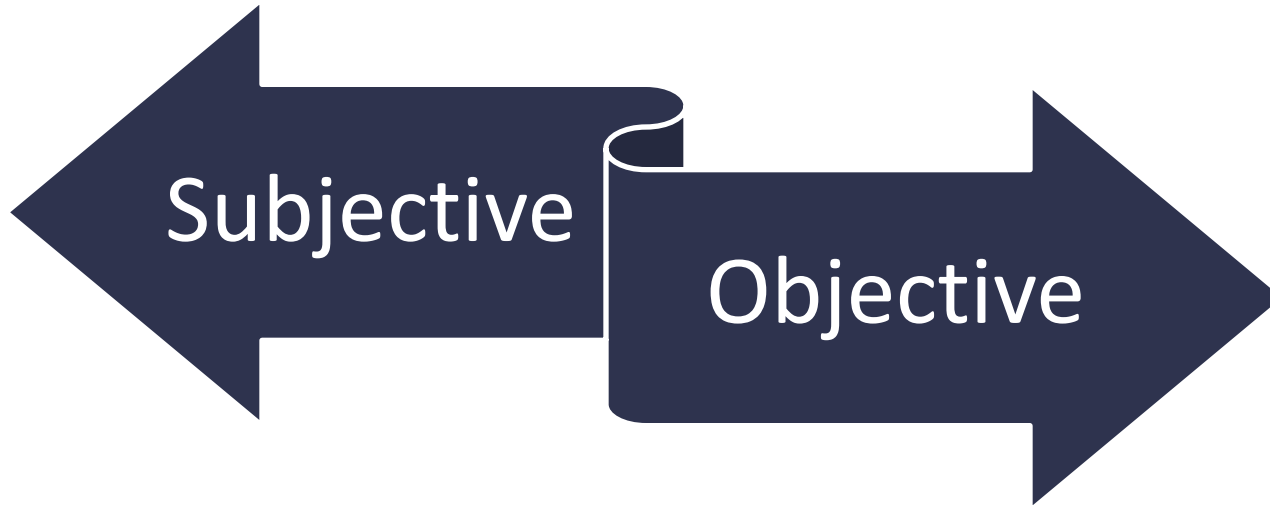
Consultations:

- Infectious Disease: Recommendations for antibiotic regimen and duration.
- Respiratory Therapy: Provided assistance with oxygen management and breathing exercises.

Discharge Condition: John Doe is being discharged in stable condition. He is afebrile, breathing comfortably on room air, and has good overall improvement in symptoms.

Medications at Discharge:

How Are Decisions Made in Your Organizations?



Key Questions for Leadership



Are we leveraging data effectively for decision-making?



Do we have real-time visibility into operations?



Are we future-proofing our organization with AI and automation?

AI Use Case: Financial Planning and Analysis

Challenges:

- ☐ Managing data in silos
- ☐ Manual manipulation of data
- ☐ Endless Excel workbooks, and PDF Reports
- ☐ The hassle of distributing reports to stakeholders

“Is this even, right?”

“This is outdated, I asked for this weeks/months ago.”



Are Your KPI's at Your Fingertips?

- Patient satisfaction scores
- Readmission rates
- Length of stay
- Provider productivity
- Turnover rates
- Cost per visit and revenue per episode
- Compliance and documentation accuracy





Business Insights Through Business Intelligence Tools

Connect *multiple* key data sources for integrated reporting

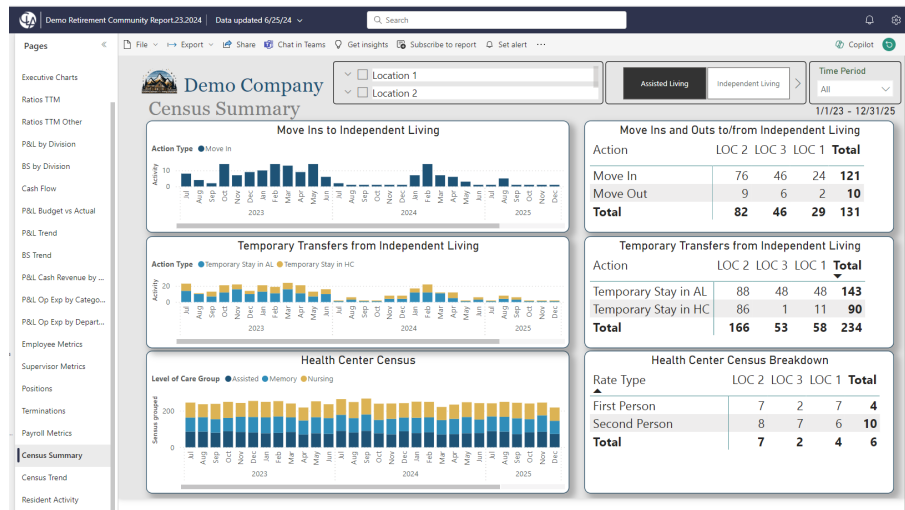
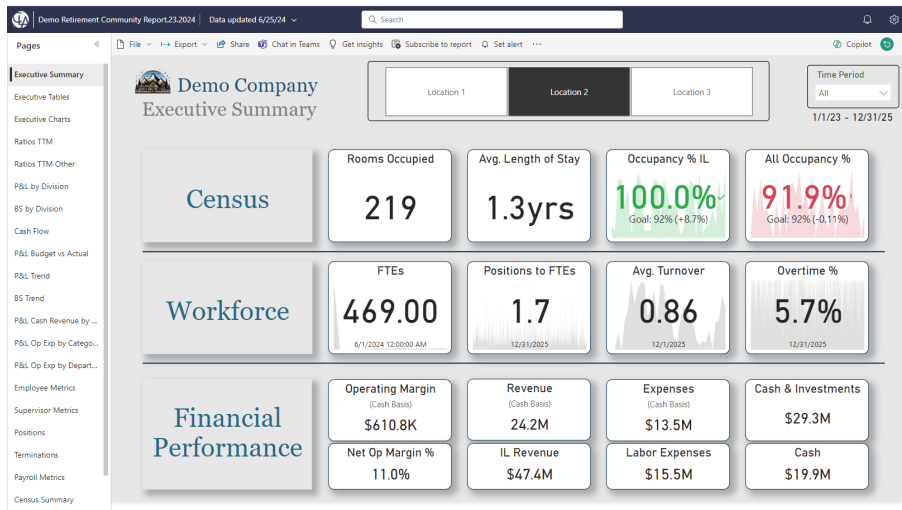
Reduce the time taken to complete financial reporting

Generate *accurate* financial forecasting based on business metrics

Accurate and timely business insights



Driving Performance Through Informed Decisions



- Harnessing the power of data to make decisions that drive desired outcomes.
- Connecting disparate data sources, automating reporting, and distributing insights to stakeholders and decision makers.



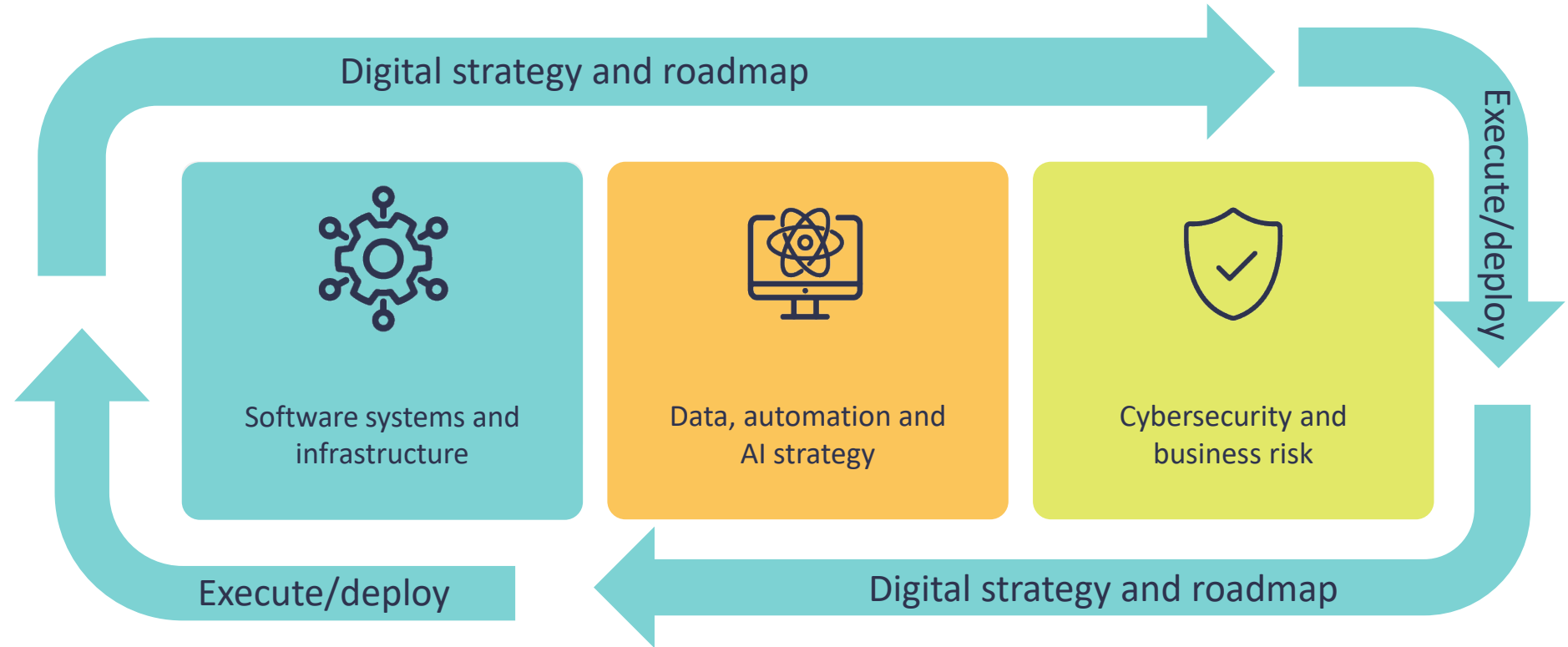


Where Should We Start?

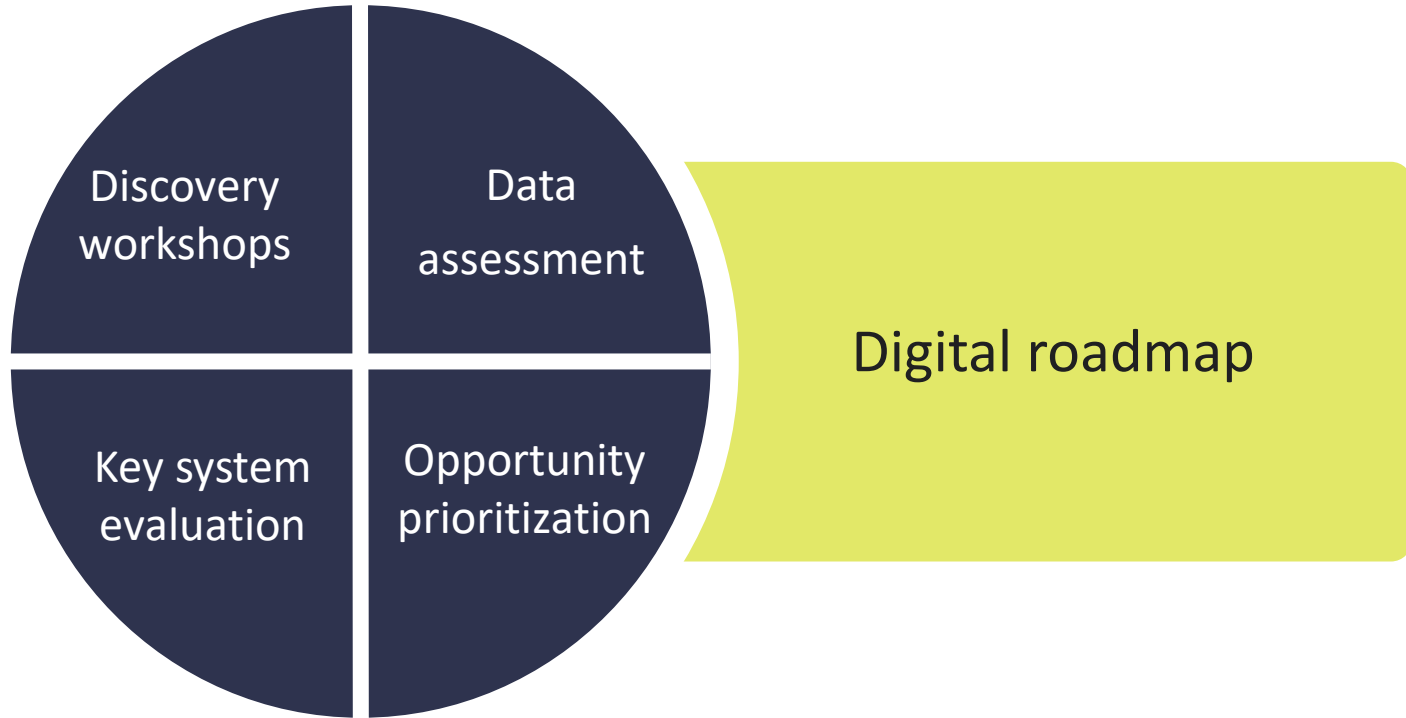
Digital Strategy and Roadmap



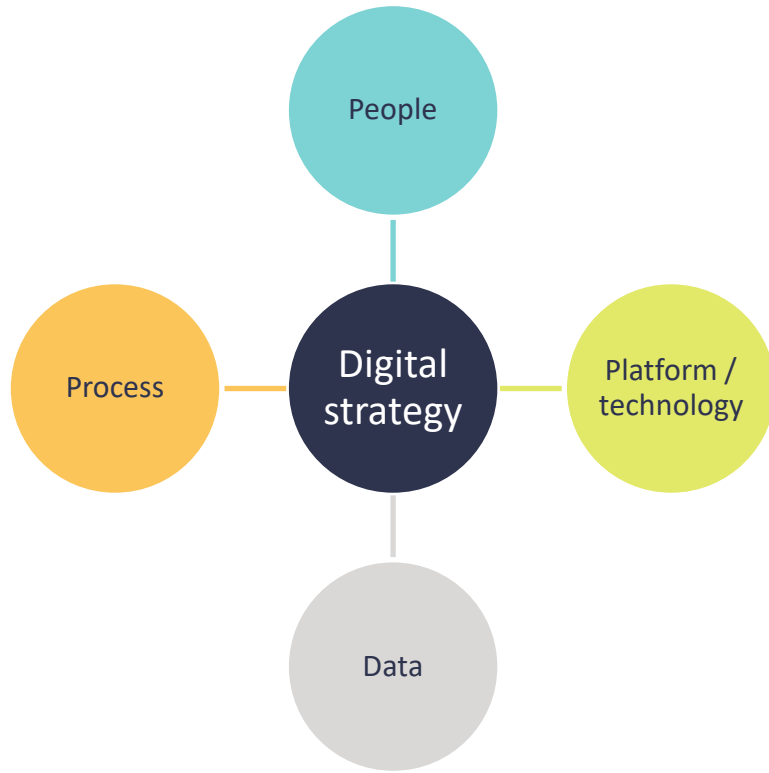
Digital Transformation Journey



Getting Organized: Digital Strategy + Roadmap



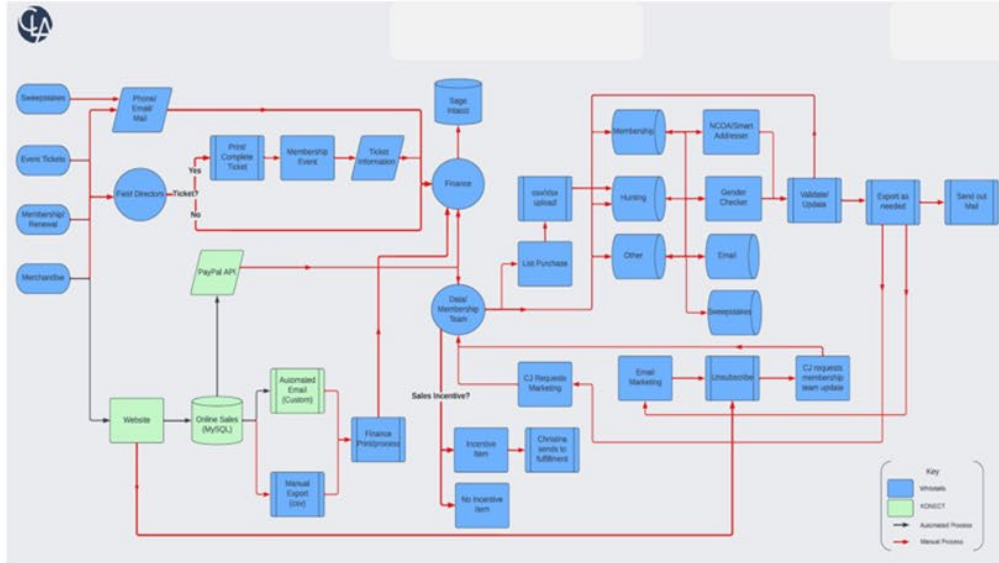
Integrated Approach: Three P's



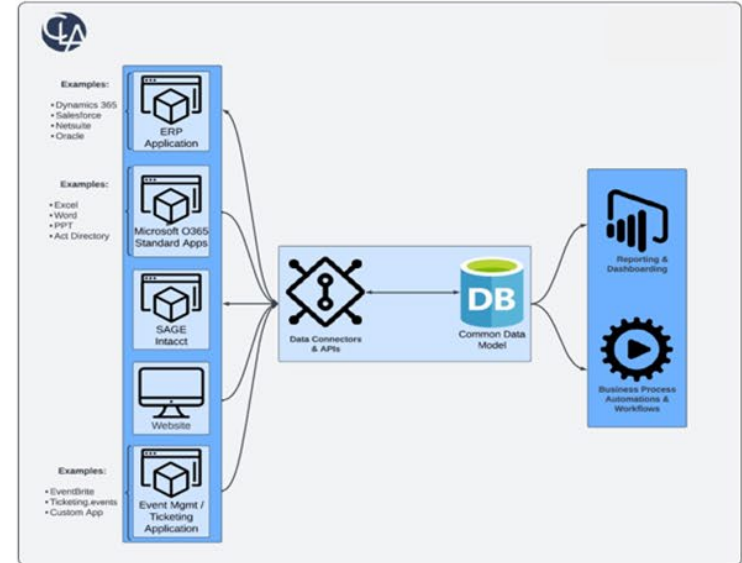
- **People, process, platform**
- Which do you trust the most?
- Which do you trust the least?
- Why?
- Where do we need help?

What Does Your Data and System Flow Look Like?

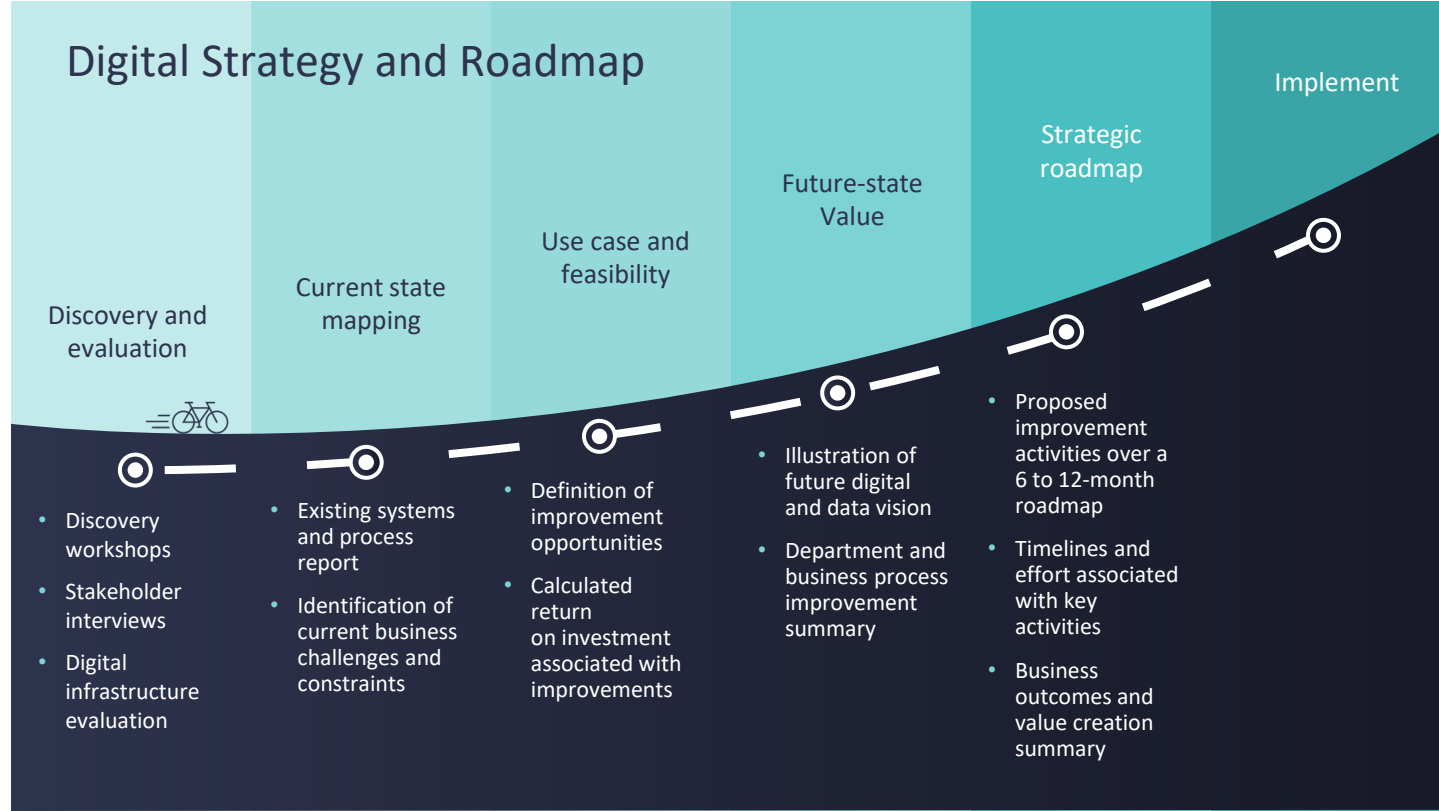
Current state process diagram



Future state process diagram



Structuring the Journey Ahead



Reimagining Health Care With the Microsoft Fabric



Data Challenges

- No comprehensive source for all aggregated data
- Securely providing care teams access to the data they need
- Slow time to insights

How Microsoft Fabric can help

- Leverage OneLake to aggregate all data into a single source of truth
- Empower health team collaboration through democratized insights
- Analyze massive amounts of data at an accelerated pace, using built-in security and governance policies

Key Outcomes

- Enable decision making backed by data to reshape care and insights
- Improve the patient experience by creating an accessible, holistic view across healthcare professionals
- Deliver secure, real-time clinical and operational insights using Event Hub, IoT Hub, Kafka, and more



Healthcare data solutions in Microsoft Fabric

Unified healthcare data accelerates business value



Accessible and discoverable data

Seamlessly integrate data from multiple sources into a unified data lakehouse that makes it easy to discover, reuse, and enhance data, removing silos.



Accelerated time to insights

Create a seamless scalable analytics that can meet the demands of the business to unlock deep insights within the data estate.



Democratized data through AI/GenAI

Empower every user to do more by infusing AI experiences across all data and applications.



Fuel AI innovation

Ground and tailor generative AI experiences in Azure AI Studio, with your healthcare data flowing from Microsoft Fabric.



Secure and Governed

Enable governance and configure permissions to regulate who can access and manipulate the data.

Microsoft Fabric

The unified data platform for AI transformation



Data
Factory



Analytics



Databases



Real-Time
Intelligence



Power BI

Fabric Platform



AI



OneLake



Governance

Source: Microsoft

UNIFIED

SaaS product experience

Security and governance

Compute and storage

Business model



Integrated solutions to secure & govern the world's data

DATA SECURITY

Secure data across its lifecycle,
wherever it lives

Data Loss Prevention
Insider Risk Management
Information Protection

DATA GOVERNANCE

Confidently activate your data &
accelerate time to insights

Unified Catalog

Data Discovery
Curation
Data Quality
Data Health

DATA COMPLIANCE

Manage critical risks and
regulatory requirements

Compliance Manager
eDiscovery and Audit
Communication Compliance
Data Lifecycle Management
Records Management

Unstructured & Structured data

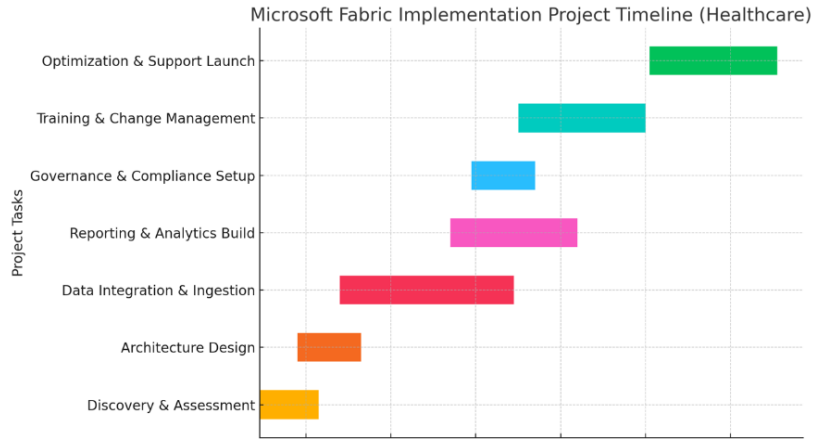
Traditional and AI generated data

Microsoft and Multi-cloud

Shared platform capabilities

AI-based efficiency, Data Map, Classification, Labels, Audit Logs, Policies, Data Connectors

Recommended Approach to Implementation and Timeline



Discovery and assessment

Architecture design

Data integration

Reporting and analytics

Governance setup

Training

Optimization launch



AI Challenges and Benefits?



AI is good at

- Variance analysis
- Pattern recognition
- Image analysis
- Information processing
- Repetitive activity automation

Humans are good at

- Reasoning
- Judgement
- Abstract thinking
- Compassion
- Imagination
- Empathy
- Creativity
- Problem solving



AI: A Few Cautions

Governance/Risk Management

- Need for robust data infrastructure facilitates better data governance
- Employ strong guidelines and process checks
- Regular risk assessments and education for employees on use of the technology while providing clear information to patients when AI is used

Cybersecurity

- AI is used in many manners—medical devices, revenue cycle, software—making cybersecurity a must have.
- Lack of cybersecurity can lead to reputational, patient and financial harm.

Legal/Regulatory

- Legal. Understanding intellectual property rights, patient privacy, contracts, and other laws surrounding use of data and AI must be assessed
- Legislative and regulatory interest. AI guardrails or regulations are coming potentially from both states and the federal government. Monitor these activities to stay compliant

Bias

- Because the crux of AI is based on data, incomplete data or biased data inputs means incomplete or biased data outputs
- Ex: algorithms in some cancer screening devices may fail to accurately predict cancers on darker skin types because those algorithms were trained on data of lighter skinned individuals

Technology and Cybersecurity

Change healthcare and fallout

- Massive hack impacting all of health care
- Hospitals hard hit but had more days cash on hand to weather claims problems
- Physician and pharmacies hit hard
- United Health Group (owner of Optum, which is Change's parent) suffered billions in earnings losses

Common cybersecurity risks

- Ransomware
- Phishing/smishing/vishing
- IoT, legacy systems
- Data breaches
- Getting more and more sophisticated

Statistics

- FBI's Internet Crime Complaint Center (IC3) found health care had the highest rate of ransomware for all 16 critical infrastructure sectors.
- Ransomware one of the top five crime types, most common was through phishing emails, Remote Desktop Protocol (RDP) exploitation, and exploitation of software vulnerabilities.

Future

- AI use (devices, third parties) creates additional vectors for attack
- Increased cyber risk
- Increased focus on technology that integrates with existing systems (like EHRs) and provides efficiencies, higher productivity
- Increased technology budgets



Interested in Learning More?

Digital introduction meeting

- Executive/board education session
- Explore trends in market
- Discuss current state and desired state

Discovery workshop

- Explore a specific business challenge and evaluate potential strategy
 - Align on opportunities

Engagement – deployment

- Deploy valuable digital strategy within your business



Thank you

Tyler Gerig, Digital Growth Director

317-569-6139

tyler.gerig@CLAconnect.com

Ryan Bjerke, MBA, Principal

612-256-8328

ryan.bjerke@CLAconnect.com

Jeremy Hillman, Digital Growth Director

656-226-5905

jeremy.hillman@CLAconnect.com



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