



We'll get you there.

CPAs | CONSULTANTS | WEALTH ADVISORS

Numbers Narrated: Conveying Financial Insights to All



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Speakers

Michael Peer



Principal – Health Care & Life
Sciences

Ryan Bjerke



Director – Strategic Initiatives,
Partnerships Digital
Innovation



Learning Objectives



Understand the Key Financial Drivers: Participants will gain insights into the primary factors that influence financial results, enabling them to grasp the 'why' behind the numbers.



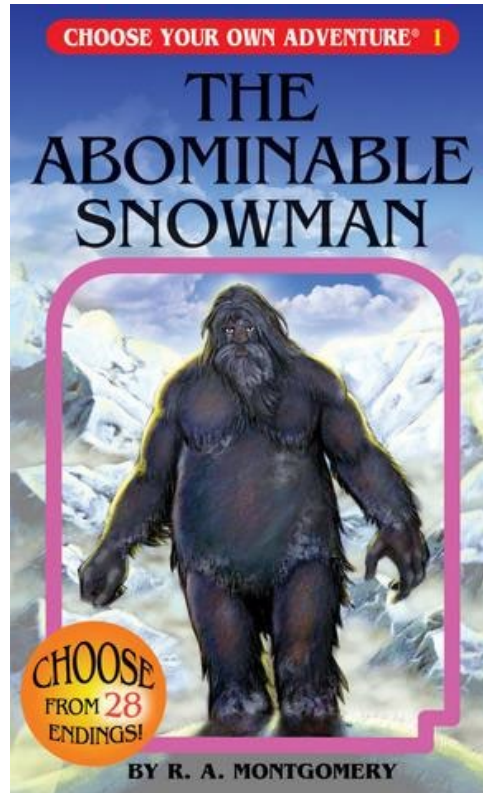
Interpret Financial Data through Visuals: Learners will develop the ability to decipher complex financial information presented through visuals, fostering a more intuitive understanding of financial statements and reports.



Enhance Operational Performance: Attendees will explore strategies for leveraging financial data to make informed decisions that positively impact the organization's operational outcomes.



Choose Your Own Adventure



Choose Your Own Adventure



1

“What?!” cries Batman, nearly crashing the Batmobile. He has been speeding toward the dark streets of Gotham on his way to Police Headquarters, when the familiar Bat-Signal suddenly changed into a grinning skull! *Someone has tampered with the searchlight, thinks Batman. But why turn the bat silhouette into a DEATH’S HEAD?! It must be a warning . . . or a trap.*

Batman’s next move could be critical. A wrong decision might mean his DOOM!

If Batman drives straight to Police Headquarters, turn to page 17.

If he radios Commissioner Gordon from the Batmobile, turn to page 26.

If he plays it safe and uses a public phone, turn to page 3.

For more information on the Bat-Signal, turn to page 119.



How Does Your Organization Make Decisions



Emotional-Based Decisions



“Skate to where the puck is going to go”





State of the Healthcare Industry

*Increasing use of
Technology, AI,
Data, Business and
Production Insights*



Differentiating those that will succeed!



“At its core, **data matters** because it not only measures progress, it inspires it!” Forbes.com

“**What Gets Measured Gets Improved!**” Peter Drucker

“Data is usually talked about only in the context of **accountability** and portrayed as something separate from day-to-day **learning.**” Dataqualitycampaign.org



Decision Making Leveraging Data Analytics



Communication Methods Matter

Historical Communication

Revenue stream 1	7,692.6	7,814.6	7,938.7	8,064.6	8,192.6
Revenue stream 2	1,907.8	1,938.0	1,968.8	2,000.0	2,031.8
Returns, Refunds, Discounts	(275.3)	(279.7)	(284.1)	(288.6)	(293.2)
Total Net Revenue	9,325.0	9,473.0	9,623.3	9,776.0	9,931.2
Cost of Goods Sold	3,533.2	3,589.3	3,646.3	3,704.1	3,762.9
Gross Profit	5,791.8	5,883.7	5,977.0	6,071.9	6,168.3
Expenses					
Advertising & Promotion	250.6	255.6	260.7	265.9	271.1
Depreciation & Amortization	1,456.8	1,485.8	1,515.3	1,545.4	1,576.1
Insurance	14.7	15.0	15.3	15.6	15.9
Maintenance	76.4	77.9	79.5	81.0	82.6
Office Supplies	37.5	38.3	39.0	39.8	40.6
Rent	77.7	79.3	80.9	82.5	84.1
Salaries, Benefits & Wages	3,366.7	3,433.6	3,501.8	3,571.4	3,642.3
Telecommunication	20.1	20.5	20.9	21.3	21.7
Travel	30.8	31.4	32.1	32.7	33.3
Utilities	18.8	19.1	19.5	19.9	20.3
Other Expense 1	50.9	51.9	53.0	54.0	55.1
Other Expense 2	-	-	-	-	-
Total Expenses	5,401.1	5,508.4	5,617.9	5,729.5	5,843.4
Earnings Before Interest & Taxes	390.6	375.2	359.1	342.4	324.9
Interest Expense	30.0	25	25	25	25
Earnings Before Taxes	360.6	372.7	356.6	339.9	322.4
Income Taxes	108.2	111.8	107.0	102.0	96.7
Net Earnings	252.4	260.9	249.7	237.9	225.7

Future Communication

Median Operating Margin

● Operating Margin (median) ● Excluding PHE Funding



Median Paid Nursing Hours Per Day



Use of Data Today and Tomorrow

- What data are you generating today, and how can you use that data to create insights?
- Are you using data to communicate your value to other health care providers and payors?
- Are you willing to invest in one or more employees or partners specializing in data analytics, with confidence, their value would exceed their cost?





Reporting & Benchmarking



Why Reports Matter

- Provides a snapshot look at the operational conditions within an organization:
 - Financial health
 - Employment stability
 - Velocity – Improving or deteriorating
- Your role in providing reports
 - Utilized for efficiency and accuracy
 - Illustrates the outcome of the work conducted
 - Supports the decision-making process



Types of Reports

- Payroll
- Financials (Income Statement/Balance Sheet)
- Governmental Publicly Reported (5 Star)
- Key Performance Indicators (Benchmarks, Ratios)
- Quality/Customer Satisfaction (5 Star, Yelp, surveys)
- Human Resource Reports
 - Work schedules
 - Injury reporting
 - Turnover statistics



Key Performance Indicators (KPIs)



Defining the performance measure that influence the primary business objectives

Determining KPIs

- A well-designed KPI will act as a compass, assisting you and the team understand that you are progressing toward the objective.
- To be effective, a KPI must be:
 - Well defined
 - Measurable
 - Communicated to the entire organization
 - A direct link to achieving an objective



Factors Influencing Reduced SNF Profitability

Hospital
Utilization

Medicare
Advantage /
Managed Care

Workforce
Challenges

Changing
Referral
Patterns

Payor Mix

Current and Future:
COVID, Economy, and
Reimbursement



KPI Examples

Objective – Increase days cash on hand by \$2M

- **Accounts Receivable KPI** – Decrease days outstanding by 15 days before June 30
 - Who – Registration, Billing, Coding, and Collections
 - What – Accounts Receivable / (Revenue/Days in Period)
 - Frequency – Reported monthly
- **Investment Return KPI** – Maintain average return of 5% through December 31
 - Who – Investment advisors and Finance team
 - What – Maintain investment strategy to achieve stated returns
 - Frequency – Reported monthly



KPI Examples

Objective – Increase residents served by 10%

- **Vacancy KPI** – Increase average daily census by 3 residents each quarter through December 31
 - Who – Marketing, Registration, and Finance
 - What – Average census level by service type
 - Frequency – Reported daily
- **Unit turnover KPI** – A housing unit will be ready for new admission within 3 days and a SNF bed within 2 hours
 - Who – Maintenance, Nursing, and Marketing
 - What – Maintain investment strategy to achieve stated returns
 - Frequency – Reported weekly



Quantifying the Value





Industrial Revolution 4.0



Setting the Stage

America's Uncharted Territory:

Birthrates Continue to Decline

Ten Thousand Boomers Turn 70 Every Day

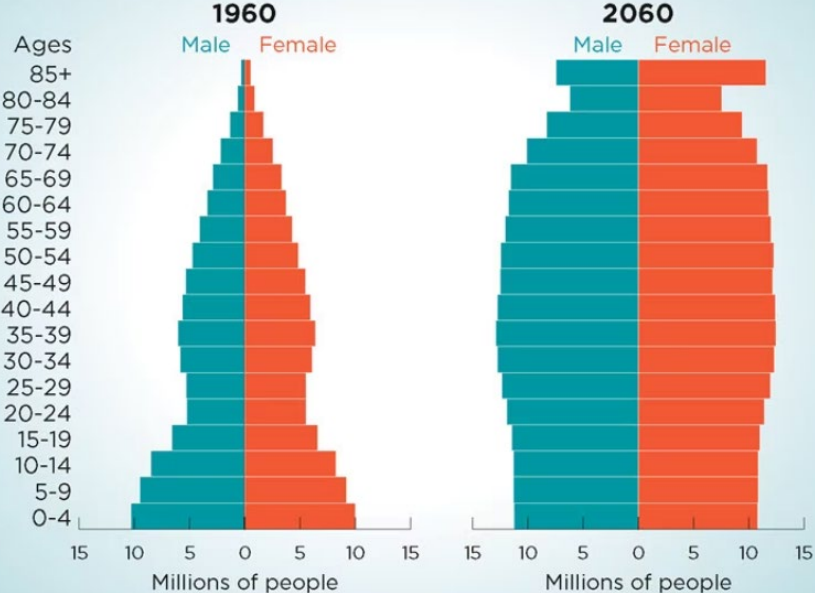
Longevity is Expected to Increase Dramatically

65+ population to rise from 10 percent in 2022 to 16 percent in 2050



From Pyramid to Pillar: A Century of Change

Population of the United States



United States[™]
Census
Bureau

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
[census.gov](https://www.census.gov)

Source: National Population
Projections, 2017
www.census.gov/programs-surveys/popproj.html



Healthcare is on the Frontline of Humanity's New Frontier



“We will experience more technological progress in the next decade than we have in the past 100 years.”

-McKinsey & Company





Frontier of Change

What can we learn from our past ?



1905

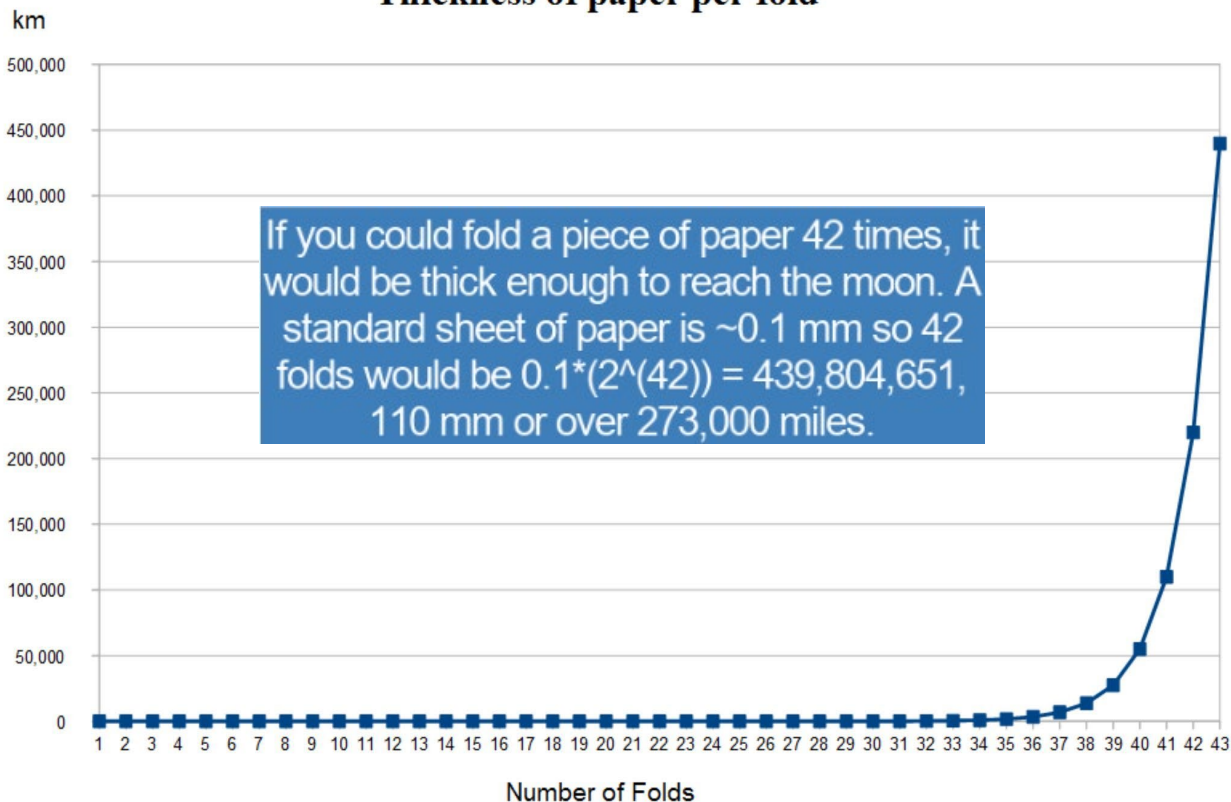


1925



Pace of Change

Thickness of paper per fold







REDSTONE
BEYOND THE FAMILY FUND

**WHO TO
BLAME FOR
COLLEGE
COSTS**

**\$60 OIL?
BELIEVE IT**

RETIREMENT GUIDE
RE-MARRY OR STACK UP?
DYING WITHOUT A WILL

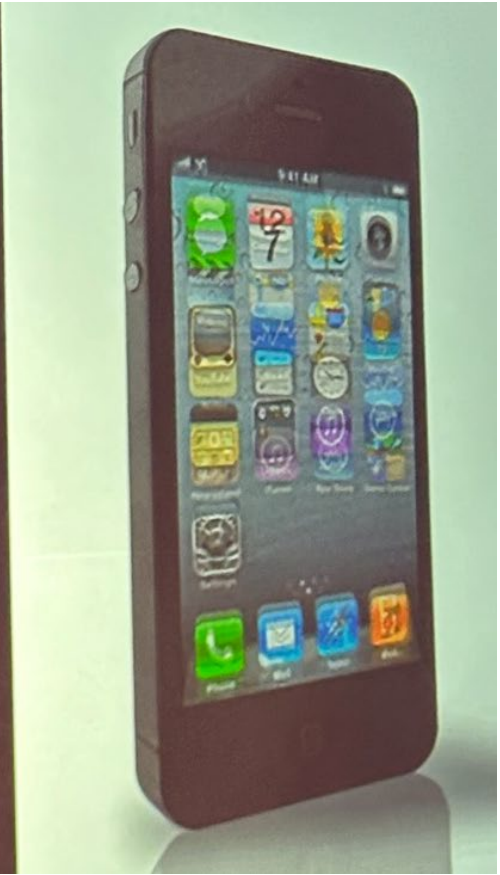
Forbes

Nokia

**ONE BILLION
CUSTOMERS—
CAN ANYONE
CATCH THE
CELL PHONE KING?**

**PLUS
11 GADGETS WE LOVE**











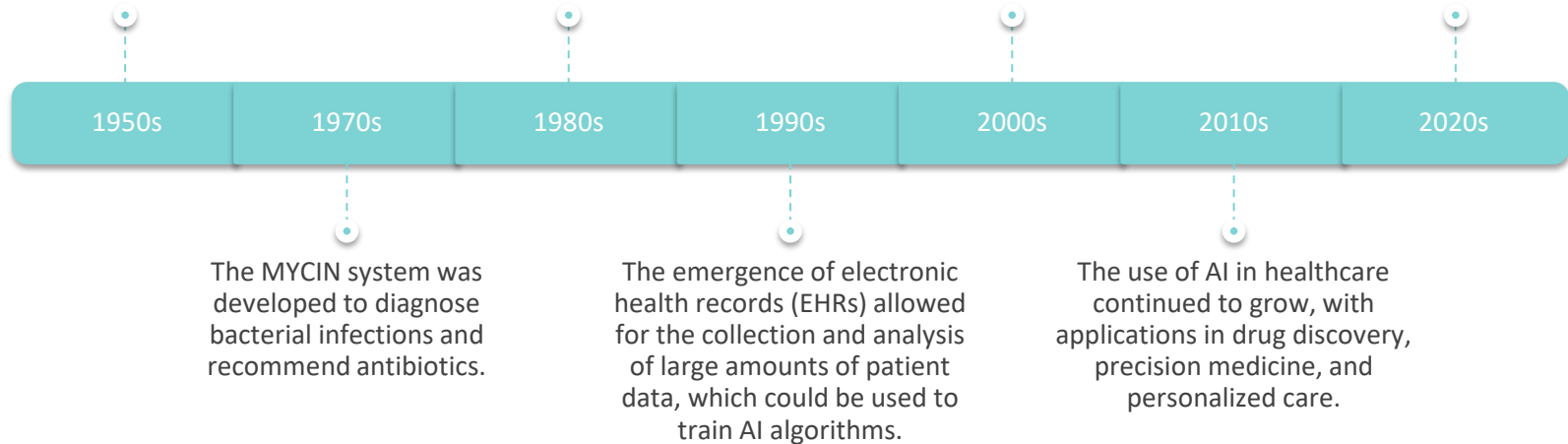
AI in Healthcare: Quick History Lesson

The earliest AI applications in healthcare were developed to perform basic diagnosis and therapy recommendations.

The first expert systems were developed to assist with medical decision-making.

AI applications in healthcare expanded to include image recognition, natural language processing, and predictive analytics.

AI is to playing an increasingly important role in healthcare, with applications in disease diagnosis and treatment, patient monitoring, and population health management.





Basics and Definitions:

What is AI and Digital Transformation?



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.



Since the Fall of 2022:

The Emergence of Generative AI

GPT= Generative Pretrained Transformer

Time to Reach 100 Million Users



Chat GPT

2 months



9 months



Instagram

2.5 years

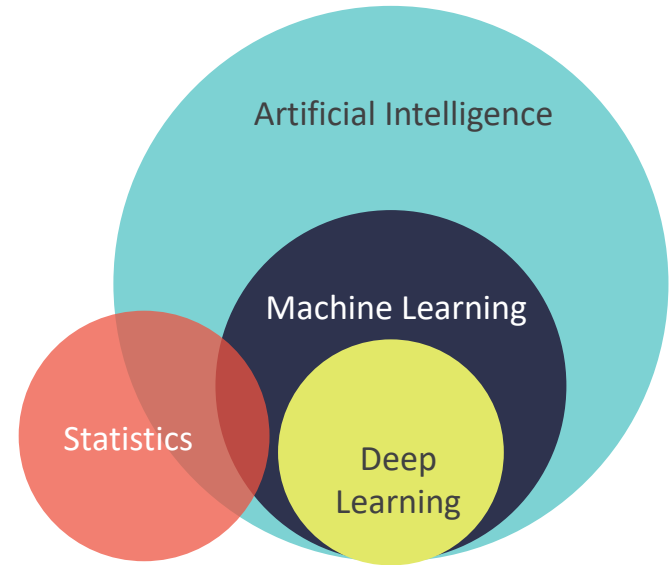


Snapchat

3 years

What is AI?

- Traditional Computing: Set of explicit instructions for a specific task
- Artificial Intelligence (AI):
Machines learning and making decisions from data, updating with new feedback

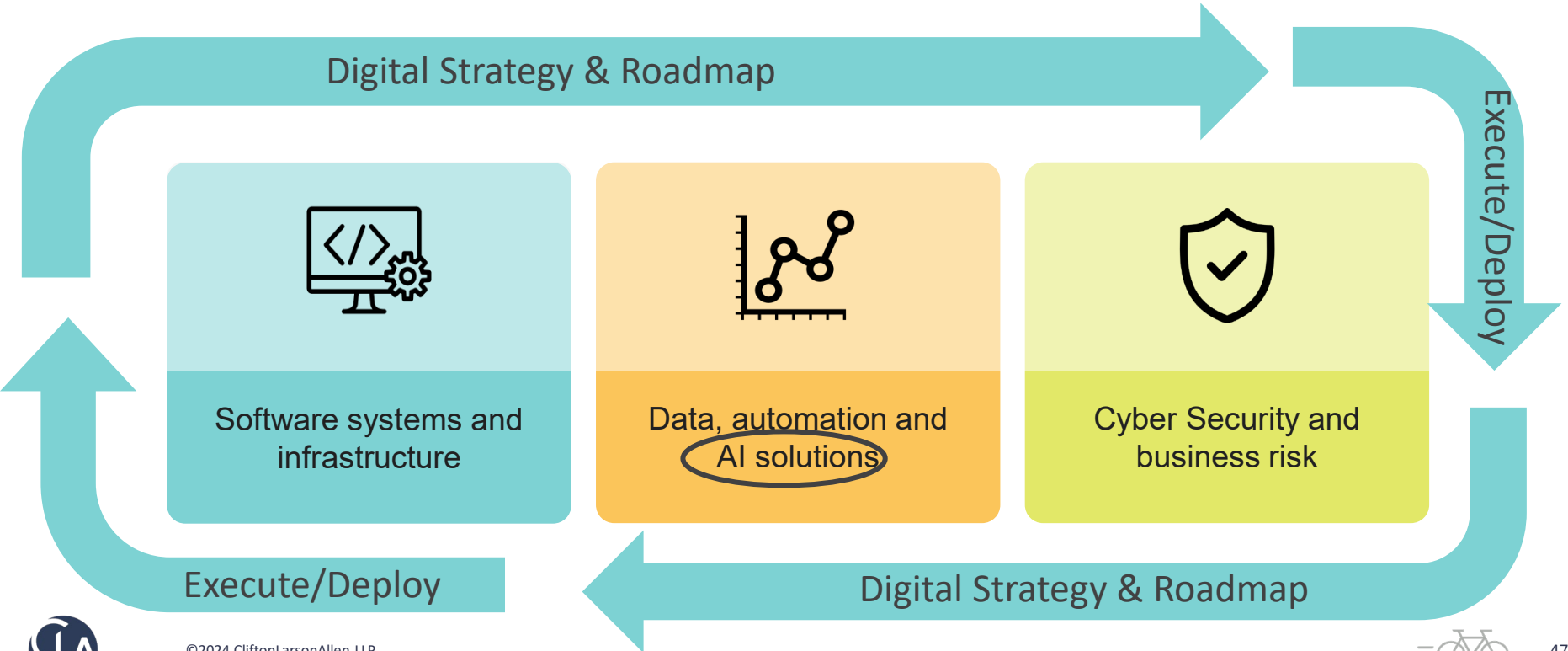




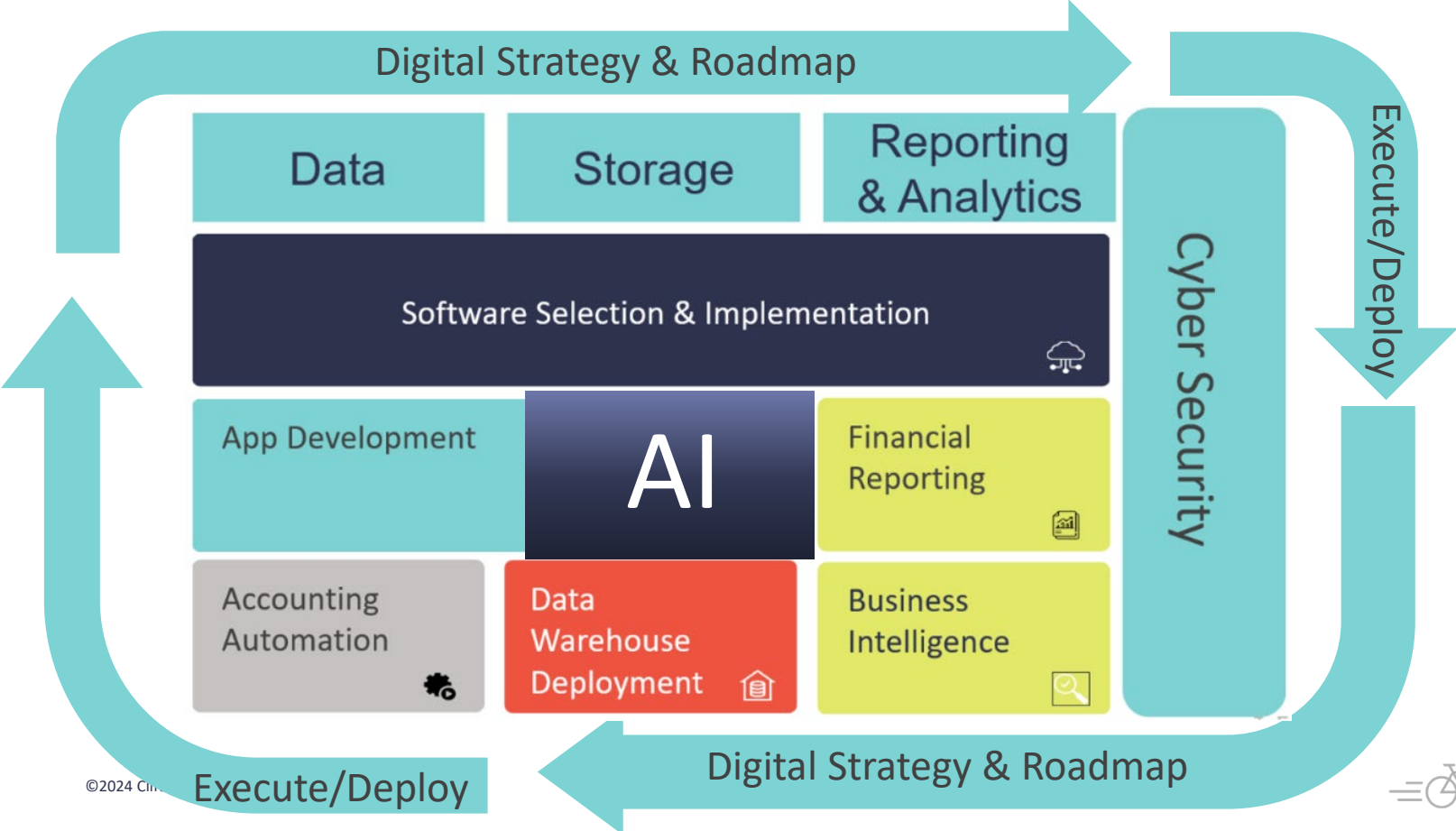
AI as a component of Digital Transformation?



Digital Transformation ...



Essential Building Blocks





Poll

What Best Describes
Where You Are in Your
Digital Lifecycle?

Phase 1:
Multiple
disconnected
systems, lots of
manual

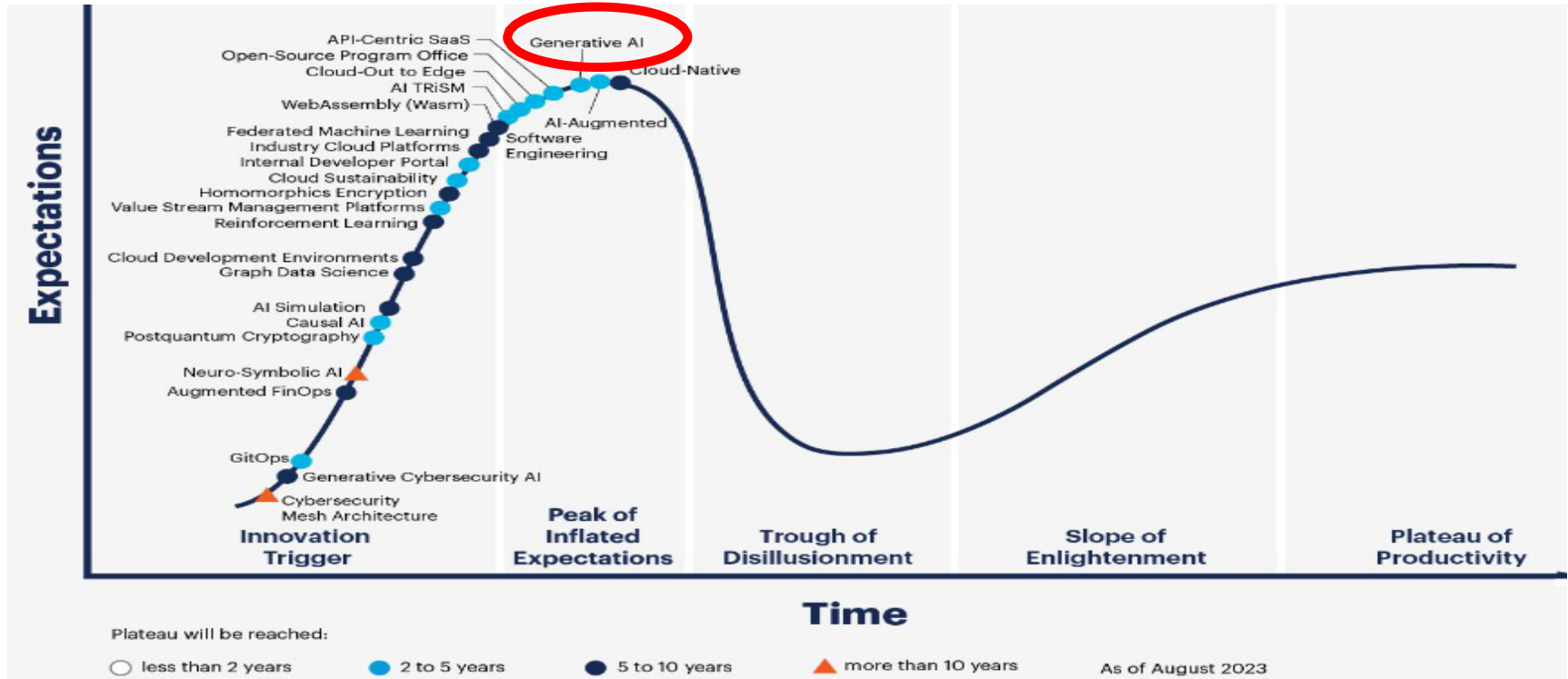
Phase 2:
Some automated
dashboards, exploring
integrating systems

Phase 3:
Integrated systems,
automated
dashboards, exploring
AI/Machine Learning

Phase 4:
Advanced analytics
and AI/ML integral to
business decisions



Gartner Emerging Technologies Hype Cycle





Why

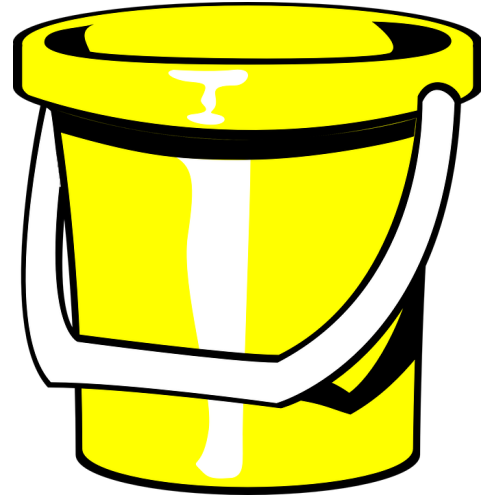
AI & Digital Transformation
is Essential for Success in Health Care?



Which Bucket Has More Data?



Data Produced in One
Single Day... Present
Day



All data from Beginning
of Time leading up to
2017?



INFORMATION
20 YEARS AGO



INFORMATION
TODAY



5 Common Pain Points



**Lack of
real-time
data**



**Systems
not talking
to each
other**



**Disruption
to legacy
systems**



**Evolving
industry
structure &
realignment**



**Recruiting
& retention**



Where Do I Start Applying AI





I went to nursing school only to be turned into a data-entry clerk!!!

Quote from almost everyone.. Doctor, Nurse, Tech, Reg/Sched/Rev Cycle etc.



“The current state is not sustainable”



Up to half of a nurse's time is spent doing things other than direct patient care. (Cato, Kenrick and Sun, Carolyn, 2020; Accenture, 2021)

Quality of care decreases when conditions do not allow nurses to fully employ their skills.

(Aiken et al., 2012; Duffield et al., 2011; Jones et al., 2015)

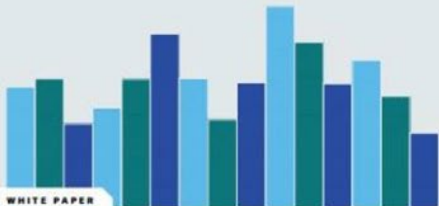
The preponderance of administrivia and low-value repetitive activities affects RNs' job satisfaction and retention.

(Jones et al., 2015; Lindqvist et al., 2014).

Too much time spent on administrative tasks is a major contributor to burnout.

(Olive, 2021).





WHITE PAPER

Tackling the Health Care Workforce Crisis through Human Innovation



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Optum



“In health care today, we have really good people getting chewed up by old, outdated, and inefficient processes—with which technology can help,” says Tom Lawry, managing director of Second Century Technology.



How is Digital Applied in Healthcare?

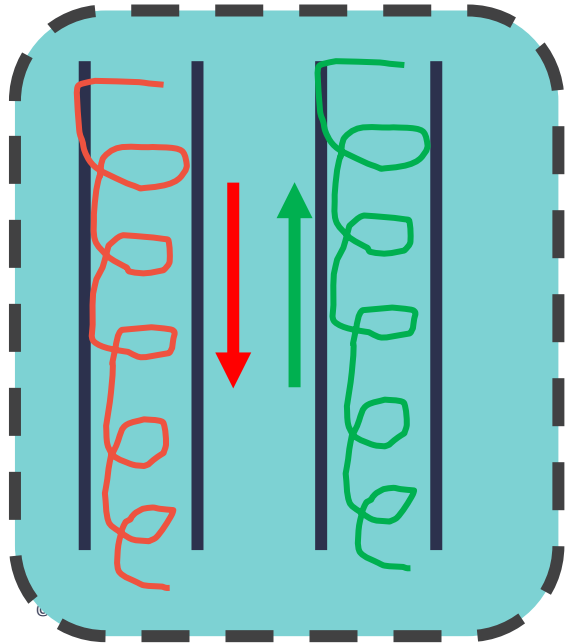
Use Cases



Digital Transformation = Catalyst for Change

Confined Mindset

(The Way We Have Always Done Things)

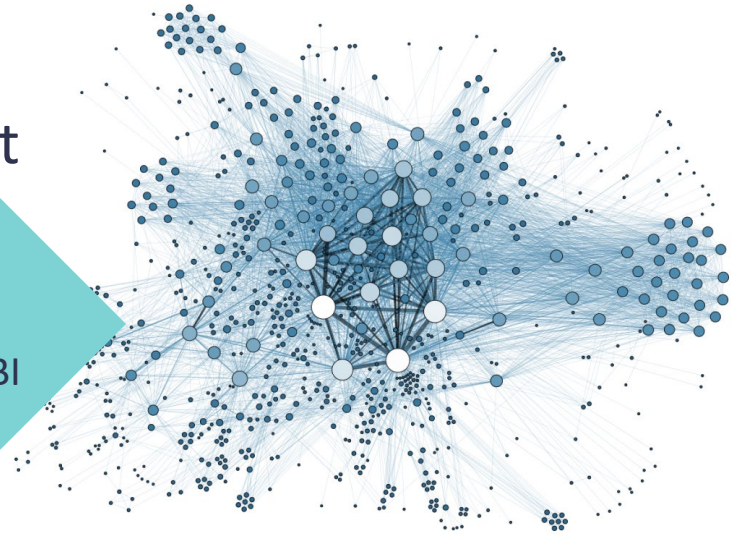


Art of Possibility

(You mean there's a different way?)

Mindset Shift

Digital
Transformation+
AI + Automation +BI



Digital Transformation

- Automation
- Artificial Intelligence
- Machine Learning
- IoT – Internet of Things
- ChatGPT



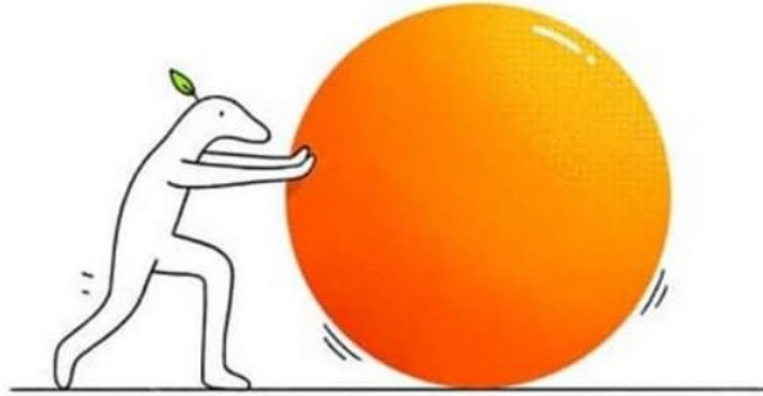
- Scheduling
- Rev cycle
- Remote Monitoring
- Interactive Bot Q&A – Routing



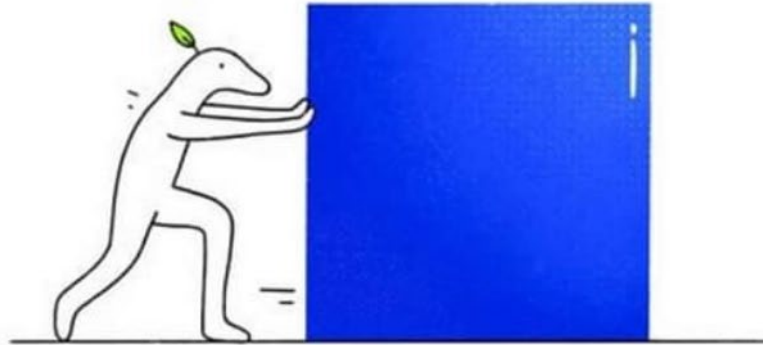
AI Sophia



Theme



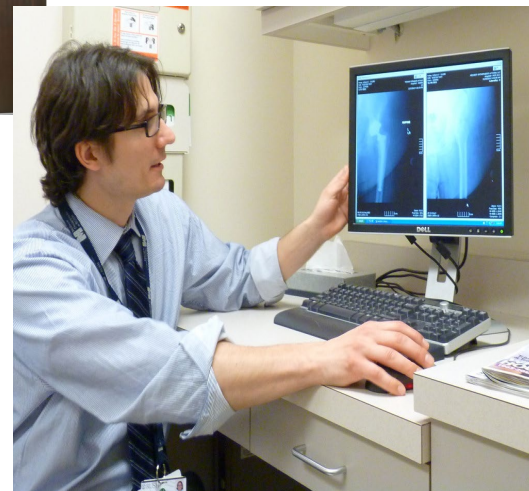
SMART WORK



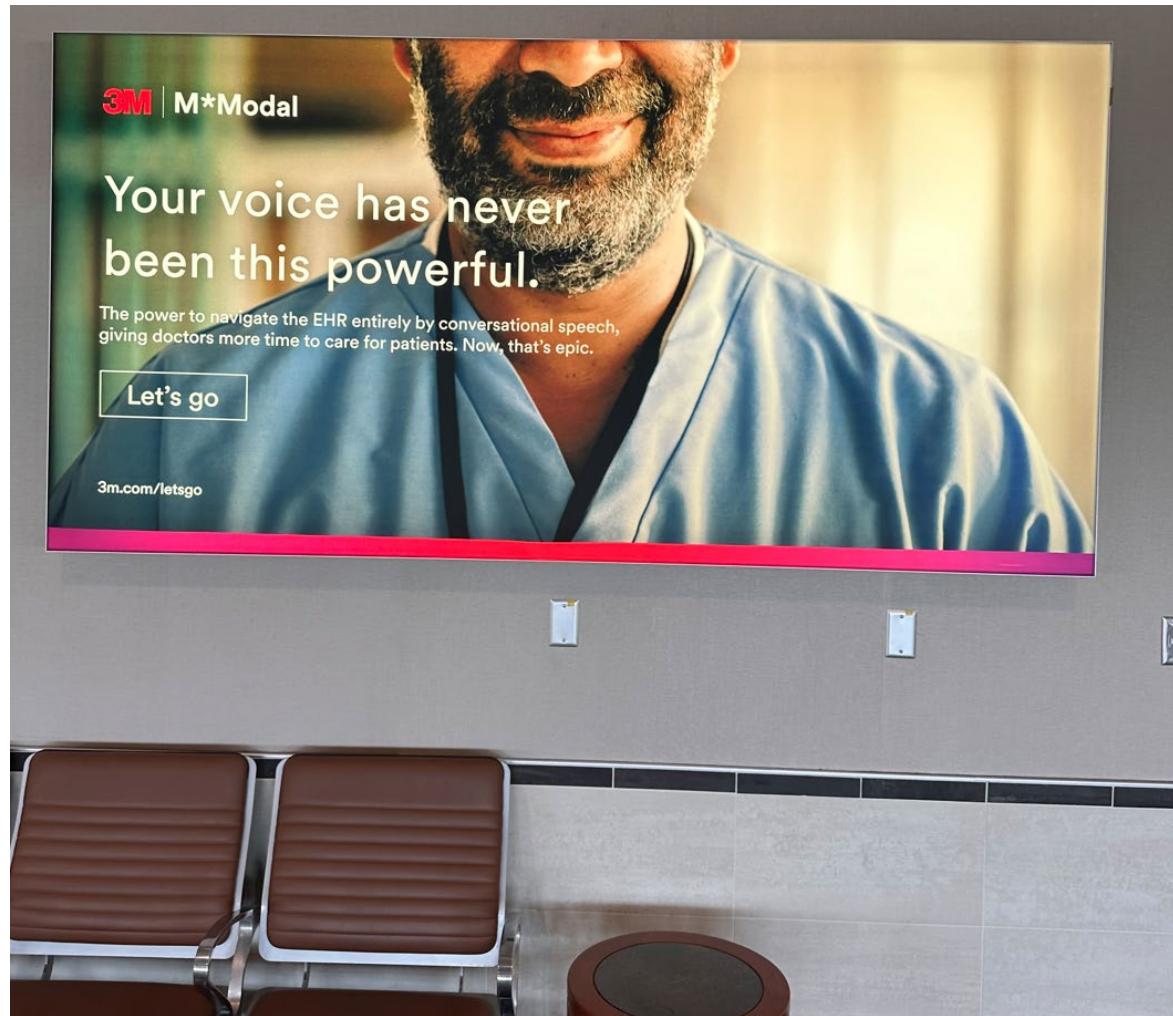
HARD WORK



AI Removing Barriers



Ambient Listening



Facial Recognition for Patient Authentication



A Powerful Example

Can anyone spot the difference between these two photos?



A Powerful Example

Can anyone spot the difference between these two photos?



Female



Male

A Powerful Example

Can anyone spot the difference between these two photos?



Female



Male

Hundreds of Eye Experts: ~50% (no better than a coin toss)

A Powerful Example

Can anyone spot the difference between these two photos?



Female

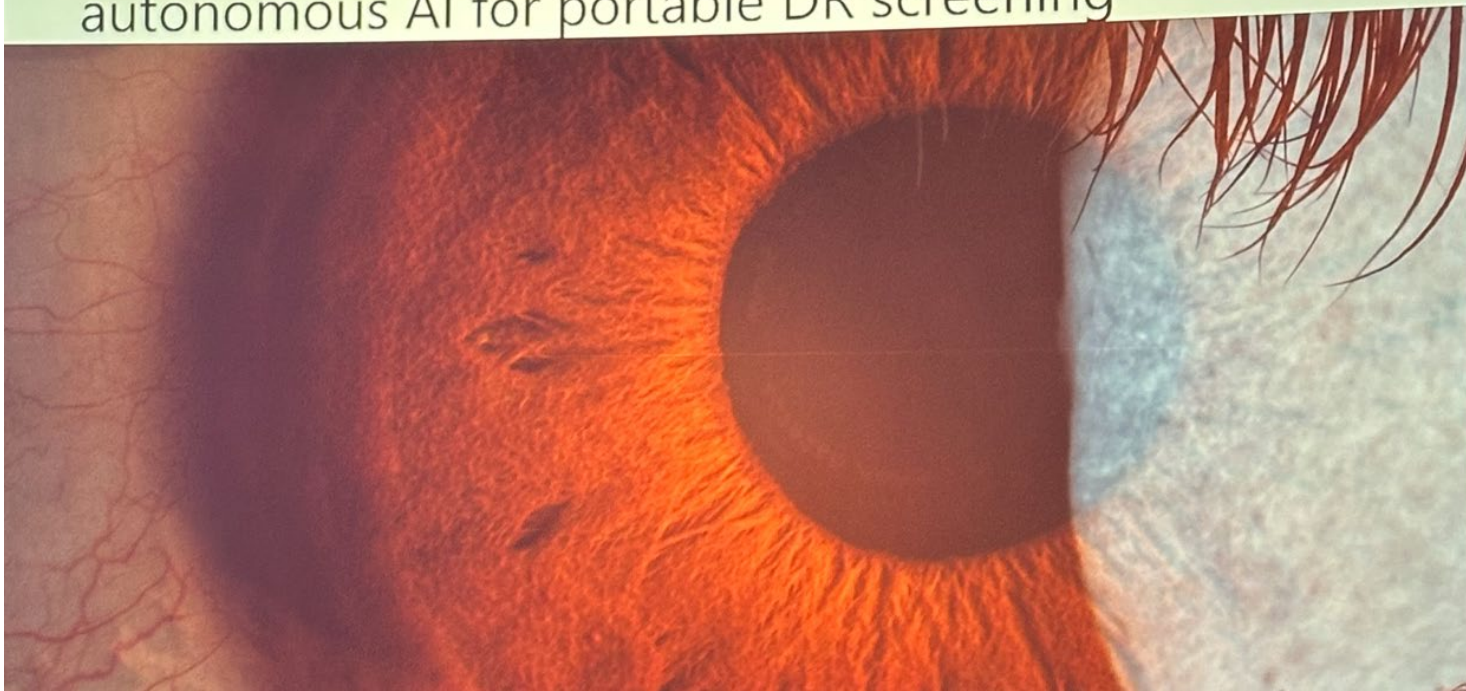


Male

Hundreds of Eye Experts: ~50% (no better than a coin toss)

AI: Near 100% accuracy

AEYE Health receives FDA clearance for first ever fully autonomous AI for portable DR screening



Using Retinal Images to Predict Risk of Eye and Systemic Diseases

First Name _____

Last Name _____

Email Address _____

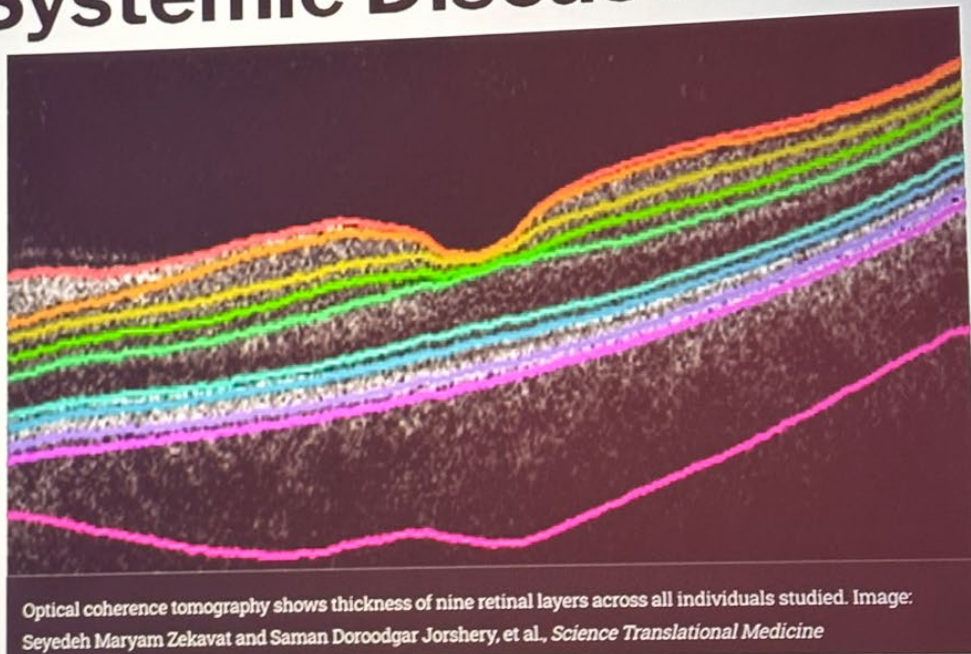
Which publications would you like to receive? *

- Harvard Medicine magazine (monthly)
- Harvard Medicine News (weekly)

Sign Up



RSS



Age-Related Conditions

Dementia
Parkinson's disease
Alzheimer's disease
Vision/hearing loss

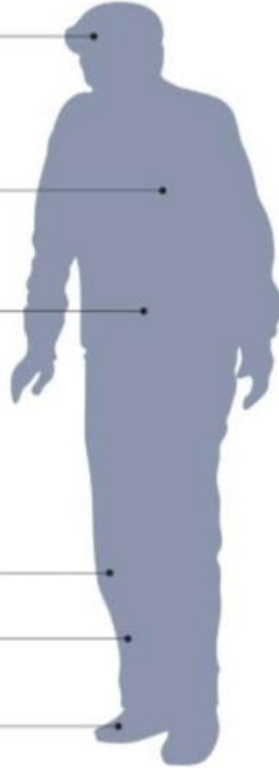
Cardiovascular disease
Hypertension

Diabetes
Obesity
Kidney disease
Gastrointestinal disease

Osteoarthritis

Fall

Foot problems



Physical & Chemical Signals That Reflect Health Conditions

Physical

Heart rate, ECG
Respiration rate
Temperature
Blood pressure
Blood oxygen
Gait
Tremor
Postural balance
Acceleration, GPS
Plantar pressures
Shear
Sleep

Chemical

Glucose
Electrolytes
L-DOPA
Creatinine, urea
C-reactive protein
Lactate
Cortisol
Vitamins (C and D)
Uric acid
pH
Tissue oxygen

***AI-Driven* Wearables and
Monitoring Devices Will
Alter Current Care Practices**

AI-Driven Voice Biomarkers

AI Could Analyze Speech to Help Diagnose Alzheimer's > A short voice sample could reveal disease



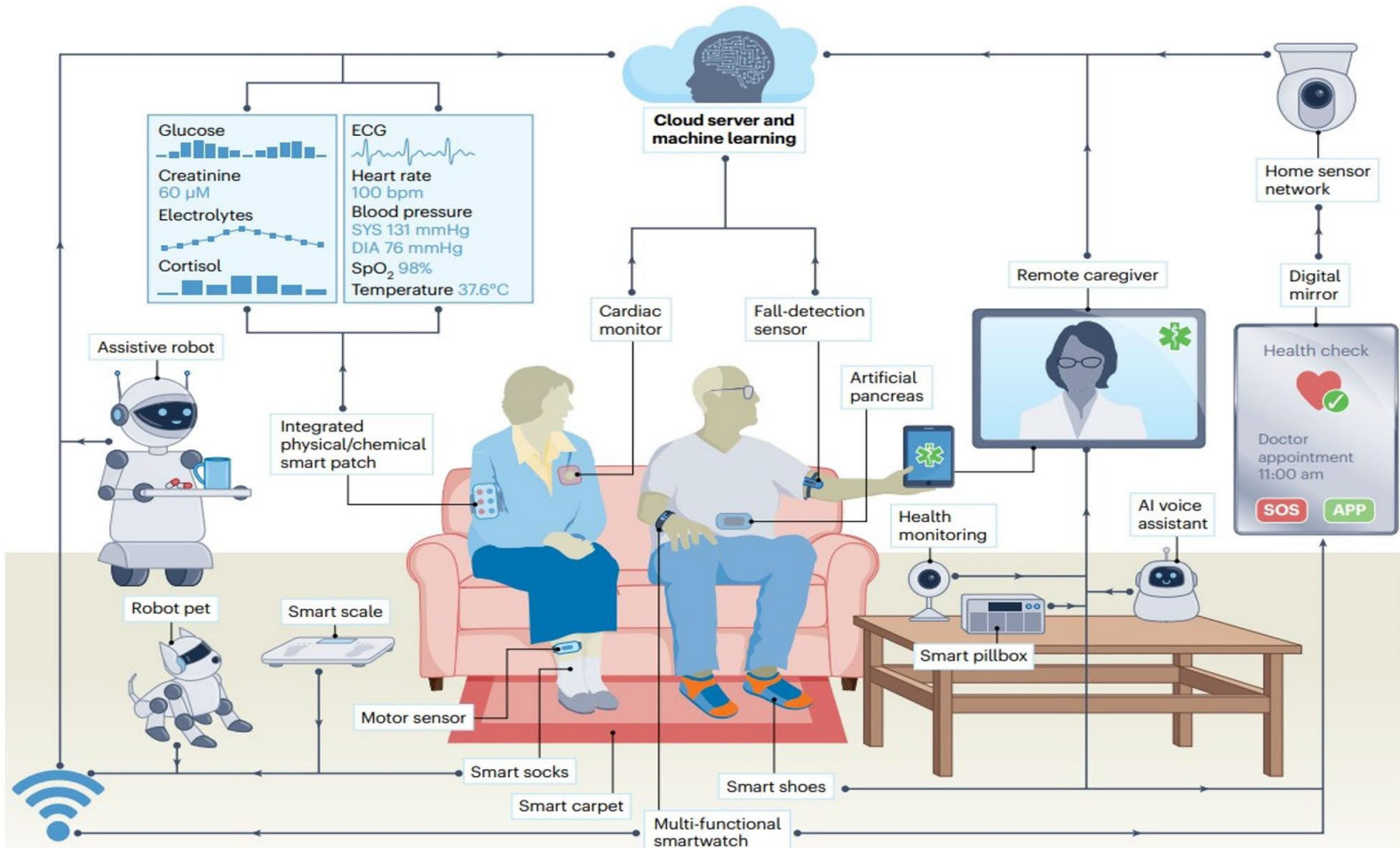
Psychology Today

DEPRESSION

**AI Can Use Your Voice to
Detect Depression**

And it only takes a few seconds.












How is Digital Applied in Healthcare?

The Business of Health Care
Use Cases



AI and your Business Strategy – Short Term

- Operational efficiencies & automation
- Be Strategically Ambidextrous
 - Optimize for today
 - Plan for winning tomorrow
- Generational Marketing Strategy
- Upskilling your workforce

	 Gen Z (Born 1997 or later)	 Millennials (Born 1982–1997)	 Gen X (Born 1965–1981)	 Baby boomers (Born 1946–1964)	 Seniors (Born 1900–1945)
Have a primary care physician (PCP)	55%	67%	76%	84%	85%
Prefer virtual visit over in-person care	41%	33%	22%	9%	7%
Trust tech companies for health & wellness services	26%	43%	32%	20%	14%
Openness to receiving virtual care from retail brands	34%	30%	26%	20%	28%

Sources: 2021 Global Health Care Outlook – Accelerating Industry Change, Deloitte
 How can Leaders Make Recent Digital Health Gains Last? Accenture



How are Decisions Made In Your Organizations?





Business Intelligence & Insights to Drive Decisions

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



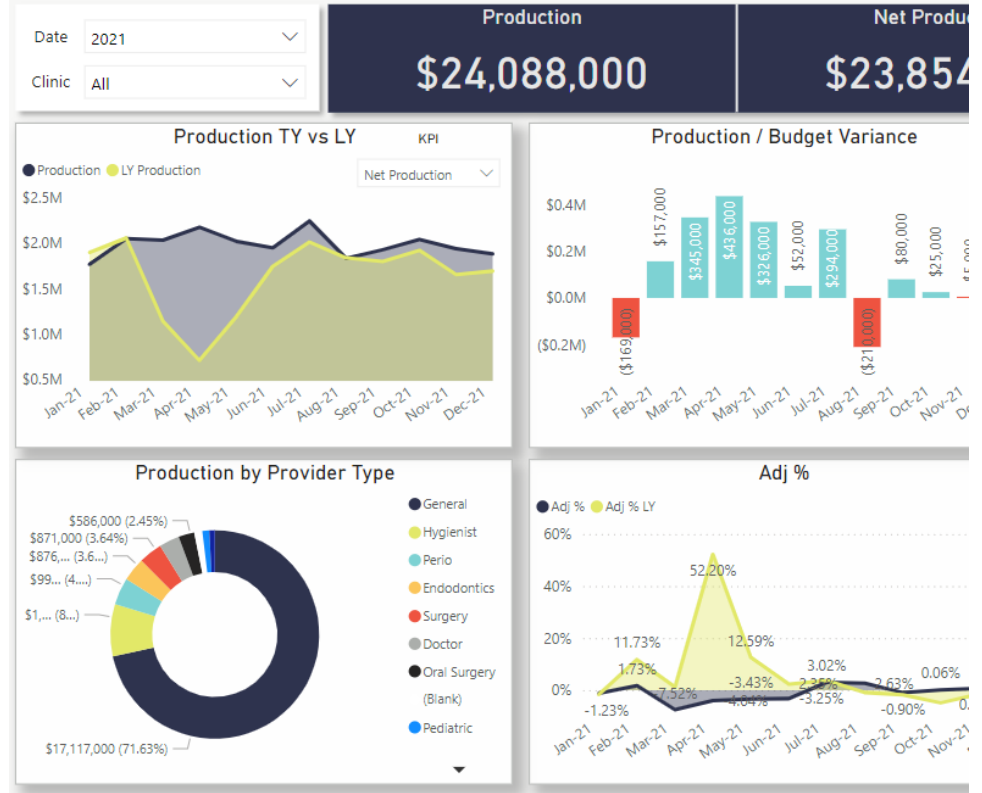
Embedded Machine Learning

- Use AI as a tool to help analyze automated dashboards and reporting

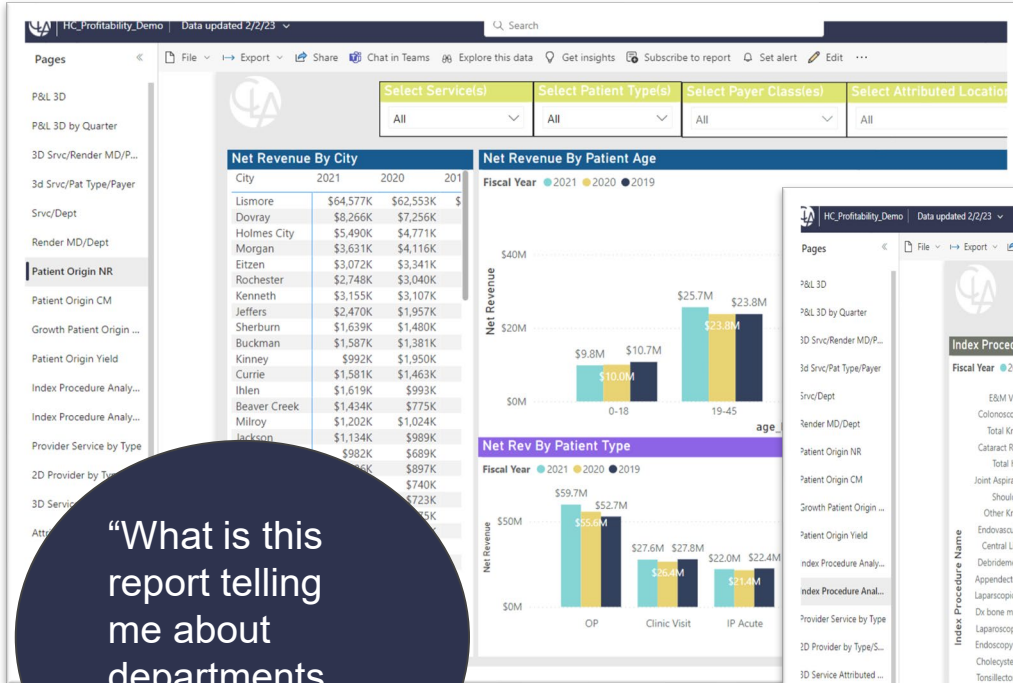
“What is this report telling me about production?”



Production Analysis

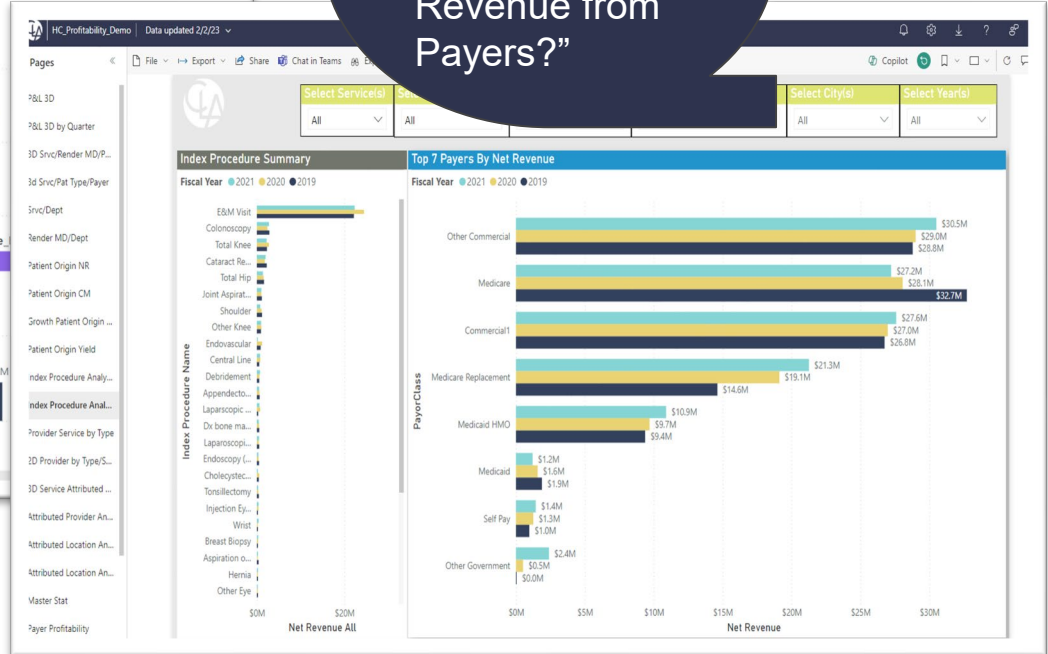


Service Line Profitability Dashboards – Senior Living and Care



“What is this report telling me about departments that bring in net revenue?”

“What is this report telling me about Net Revenue from Payers?”



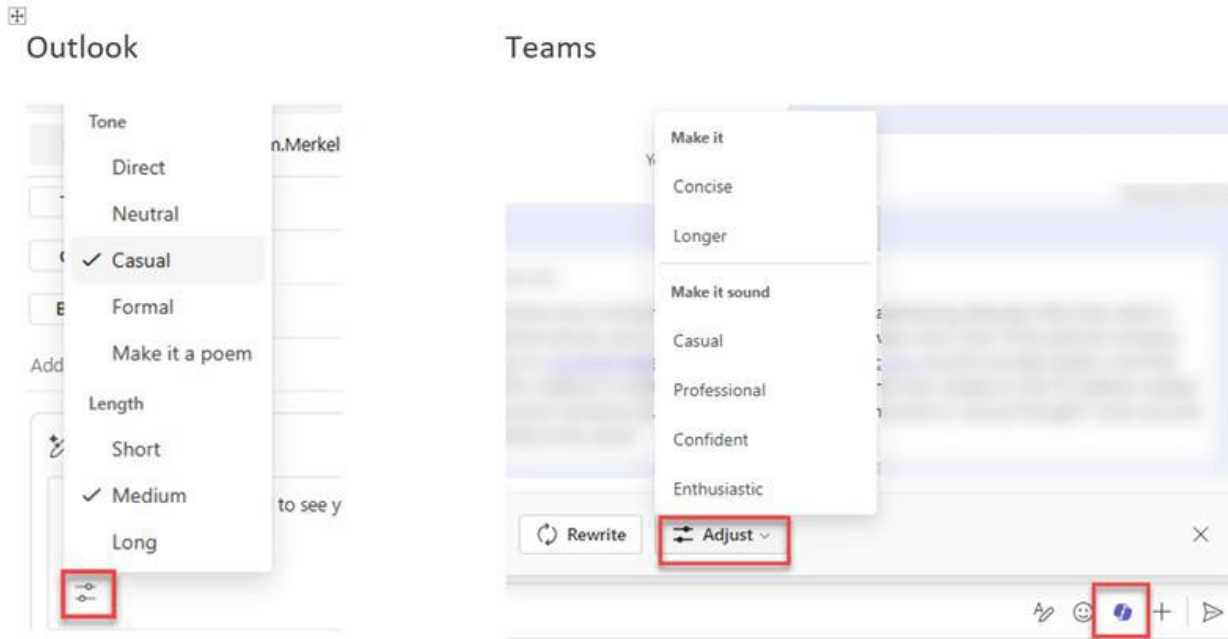
What is Microsoft Copilot?

- Processing and orchestration engine to combine the power of AI Large Language Models, including GPT-4, with Microsoft 365 apps and your business data
- Available in
 - Outlook
 - Teams
 - Word
 - PowerPoint
 - Excel



Microsoft Copilot - Drafting Messages

Prompt: Tone & Length



Microsoft Copilot - Drafting Messages

Prompt, Tone = Direct, Length = Medium

“Draft an email letting the board of directors know the financial reporting package is not yet available because Deborah had a personal matter arise but it should be ready next week.”

Generated

“I regret to inform you that the financial reporting package for the last quarter is not yet available. The reason for this delay is that Deborah, our senior accountant, had a personal matter that prevented her from completing her work on time. She is currently working on the package and expects to finish it by next Monday.”

I apologize for any inconvenience this may cause you and your decision-making process. I appreciate your patience and understanding in this matter. As soon as the package is ready, I will send it to you for your review and feedback.

Please let me know if you have any questions or concerns about this situation. Thank you for your continued support and trust in our team.”



A screenshot of a tweet from Andrej Karpathy (@karpathy) on January 24, 2023, at 3:14 PM. The tweet text is "The hottest new programming language is English" and has received 4,608 reposts, 730 quotes, 33.2K likes, and 2,759 bookmarks. Below the tweet is a bio for Andrej Karpathy, a Slovak-Canadian computer scientist who served as the director of artificial intelligence and Autopilot Vision at Tesla. He co-founded and formerly worked at OpenAI, where he specialized in deep learning and computer vision. His bio includes his birth year (1986), education (Stanford University), and an award (Innovators Under 35).



Democratization in the adoption of AI

“ For companies embracing the technology, 92% of employees say AI is having a positive impact on their work.

MIT Technology Review
[Generative AI is empowering the digital workforce | MIT Technology Review](#)
July 25, 2023

CONTOSO LTD. **INVOICE**

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

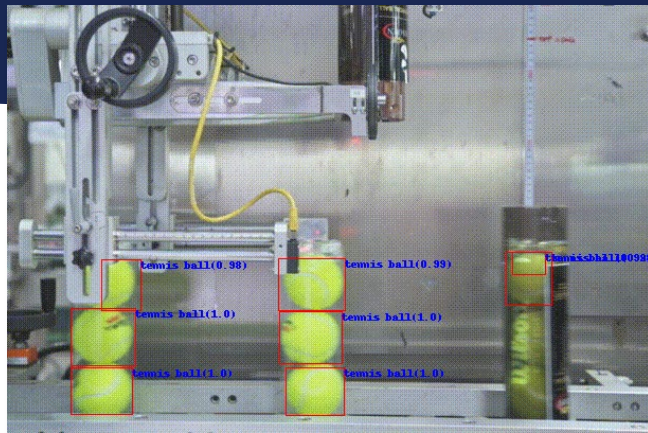
SERVICE ADDRESS: Microsoft Services
123 Service St.
Redmond WA, 98052

INVOICE: 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: CD-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	AL23	Consulting Services	2	hours	\$300.00	\$6.00	\$606.00
3/5/2021	B456	Document Fee	3		\$10.00	\$3.00	\$33.00
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!



CLAgpt

CLAgpt Knowledge

CLAgpt Knowledge is a Beta feature built to provide focused, CLA-specific responses using select sources; please verify all information produced by the model

CLAgpt is a generative AI system that is being trained from information stored within CLA's proprietary domains, datasets, and documentation. Due to the wording of your request or the format of the information accessed, this AI-generated content may be incomplete or incorrect. We recommend you include a "human in the loop" to review, evaluate, and verify the results before making any final decisions based on this AI-generated information.

Type a new question...



Generative AI: Internal LLM's

CLAgpt

CLA Knowledge ▾ Search Indexed Documents 🔍

Welcome to CLAgpt

What is CLAgpt?

CLAgpt is a generative AI system that is being trained from information stored within CLA's proprietary domains, datasets, and documentation. Due to the wording of your request or the format of the information accessed, this AI-generated content may be incomplete or incorrect. We recommend you include a "human in the loop" to review, evaluate, and verify the results before making any final decisions based on this AI-generated information.

Limitations of CLAgpt

CLAgpt is a Large Language Model (LLM) capable of answering general questions through the Base model or answering CLA specific questions through the Knowledge model. CLAgpt answers CLA specific questions by first retrieving documents based on the question and then attempting to answer the question based on the documents retrieved.

Type a new question... Submit



Invoice Automation

- AI can reduce manual effort
- AI can speed up efforts considerably

CONTOSO LTD. **INVOICE**

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: 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

Extract key fields

Human review

Map and approve



Admissions Process

Impact

- Wasted time
- problematic admissions
- Loss to competitors

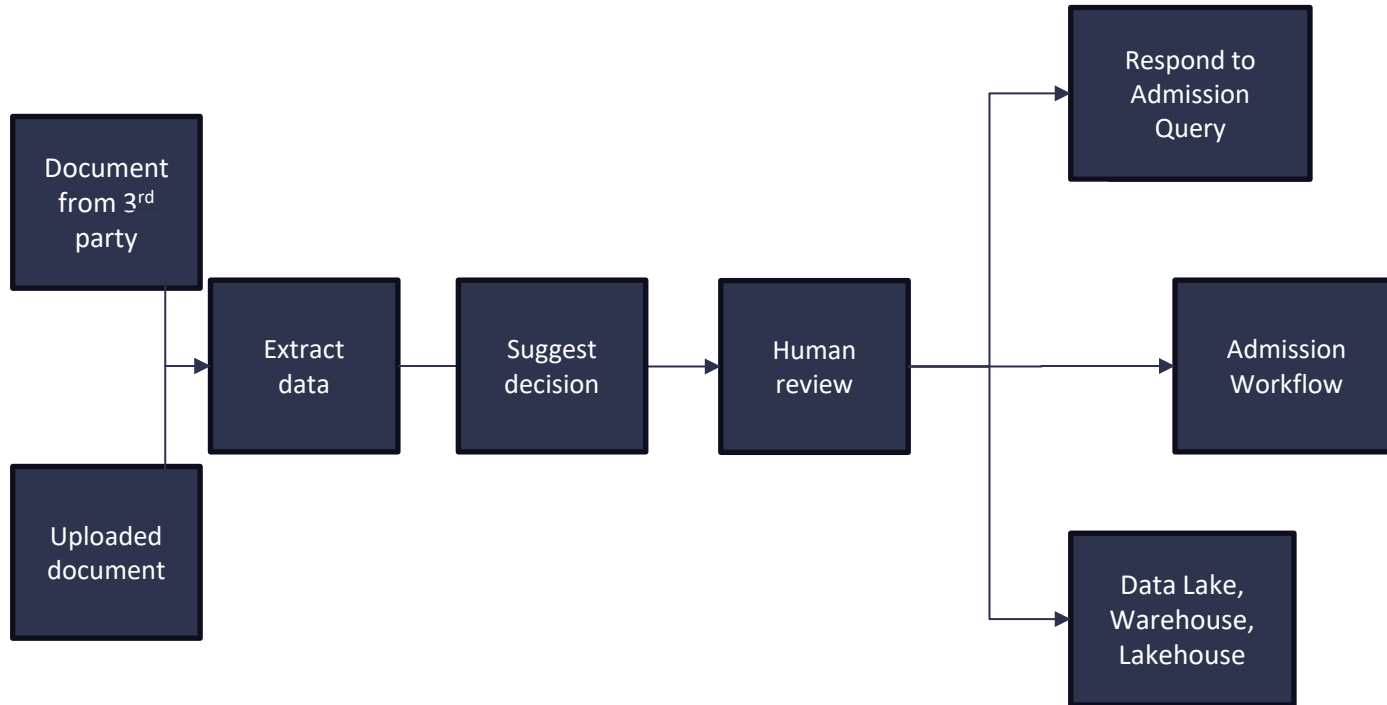


Issue

- Admission process involves lots of manual effort and disconnected systems.



Admission Abstraction



Prepopulated Extraction

- ✓ Payer Source:
- ✓ Primary Diagnosis:
- ✓ BMI:
- ✓ Medications:
- ✓ Mental Health Status:

Accept

Reject

Colorado Department of Public Health and Environment
Communicable Disease Epidemiology Program
4300 Cherry Creek Dr S, Denver, CO 80246 Phone 303-692-2700, Fax 303-782-0338

CAMPYLOBACTERIOSIS CASE INVESTIGATION FORM
Use this form to interview confirmed and probable cases of infection with Campylobacter
Questions marked with * are required in FoodNet counties (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, Jefferson) and must be entered into CEDRS

Patient Name: _____ CEDRS # _____ Interview date: ___/___/___
Agency Name: _____ Form Completed by: _____
Person interviewed: Case Other (circle: Parent Spouse Household member Friend)

Demographics and Contact Information
*Date of Birth: ___/___/___ Age: _____ (Circle: Yrs., Mos., Days) *Sex: F M
*Race (Circle all that apply):
American Indian/Alaska Native Asian Black Unknown
Pacific Islander/Hawaiian Native White Other
*Ethnicity (Circle one): Hispanic Non Hispanic Unknown
Language spoken: _____ Parent/legal guardian: _____
Residence: _____ Phone Numbers: _____
Address: _____ Home Phone: (____) _____
City: _____ Work Phone: (____) _____
County: _____ Pager: (____) _____
Zip Code: _____ Mobile: (____) _____

Laboratory information *****please confirm lab information with patient, even if already in CEDRS
Culture confirmed: Yes No Species: C. jejuni C. coli C. fetus Other Not known
Lab or hospital name: _____
*Date specimen(s) collected: ___/___/___ *Specimen source: Stool Urine
Blood Other: _____

Physician Name: _____ MD Phone: (____) _____
Clinic Name: _____ City/State: _____

Clinical Description (Yes= Y, No= N, Unknown= U)
Did the patient have symptoms?: Y N U If yes, *onset date ___/___/___ Time: ____ AM / PM

Did the patient have:
Diarrhea Y N U Fever (max temp. ___) Y N U Headache Y N U
Date diarrhea onset ___/___/___ Vomiting Y N U Body aches Y N U
Bloody diarrhea Y N U Abd. cramps Y N U Other: Y N U

How many days did the illness last? _____ days
Did case receive antibiotics for this illness? Y N U Antibiotic name: _____

*Outcome: Survived Died Unk (FoodNet counties: record pt outcome on 7th day after specimen collect date)
If died, date of death: ___/___/___

*Was patient hospitalized? Yes No Unk (ER visits only not considered "hospitalized")
If hospitalized: *Hospital Name: _____
*Date of Admission: ___/___/___ *Date of Discharge: ___/___/___
*Transferred to another hospital? Yes No Unk *Transfer hosp name: _____

January 2, 2008 Campylobacteriosis Case Investigation Form, Page 1





AI Challenges and Benefits?



AI is Good at:

Variance Analysis
Pattern Recognition
Image Analysis
Information Processing
Repetitive Activity
Automation

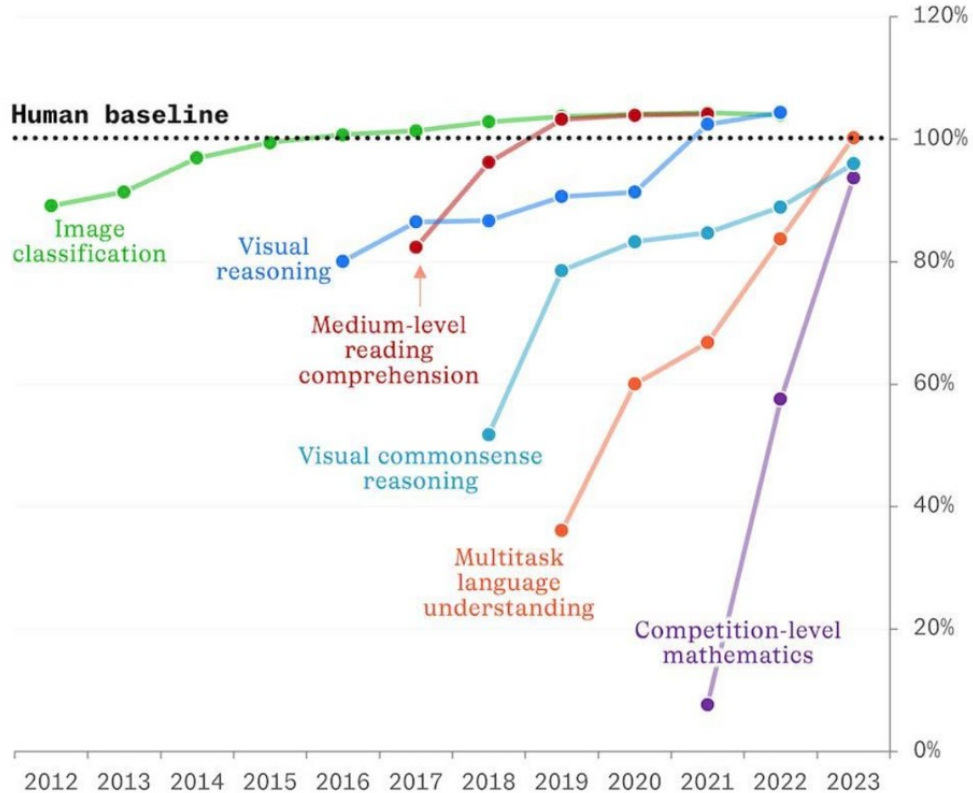
Humans Good at:

Reasoning
Judgement
Abstract Thinking
Compassion
Imagination
Empathy
Creativity
Problem Solving



AI Models Are Improving Every Year

AI Technical Performance [Selected measures, 100% = human baseline]



Benefits



Improve Efficiency



Improve Accuracy



Improve
Organizational
Capabilities



Improve Employee
Satisfaction



Generative A.I. and a Randomized Trial of Writing Tasks

- Subjects: 453 college-educated professionals
- Half were given support with ChatGPT.
- Control group not given access to ChatGPT

Results:

- Time taken to complete tasks reduced by 40% among Chat GPT Group
- Quality of output increased by 18% when comparing output of ChatGPT Group to Control Group

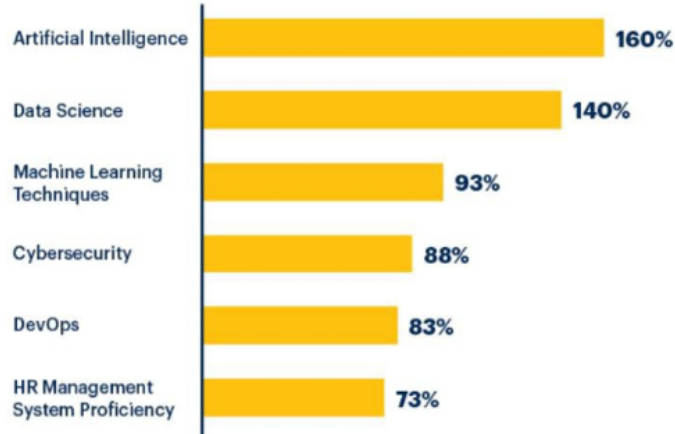
Beyond Productivity Improvements:

- Job satisfaction was significantly enhanced
- Optimism among those using ChatGPT also increased
- Inequality between workers decreased

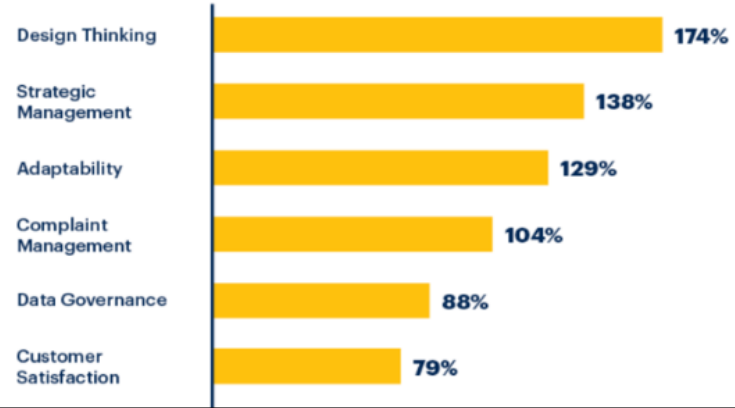
Gartner:

"Senior executives today have to influence, negotiate and innovate at speed."

Top 10 Emerging C-Suite Hard Skills



Top 10 Emerging C-Suite Soft Skills



Challenges



Data accuracy



Bias



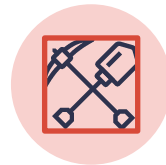
Security



Trust but
Verify



Know the
source



Fear of use of
available tools

HEALTH

Racial bias skews algorithms widely used to guide care from heart surgery to birth, study finds

By SHARON BEGLEY @shbegley / JUNE 17, 2020

Reprints



ADOBÉ

Decision aids that U.S. physicians use to guide patient care on everything from who receives heart surgery to who needs kidney care and who should try to give birth vaginally are racially biased, scientists [reported](#) on Wednesday in the *New England Journal of Medicine*.

The NEW ENGLAND JOURNAL of MEDICINE

MEDICINE AND SOCIETY

Debra Malina, Ph.D., *Editor*

Hidden in Plain Sight — Reconsidering the Use of Race Correction in Clinical Algorithms

Darshali A. Vyas, M.D., Leo G. Eisenstein, M.D., and David S. Jones, M.D., Ph.D.

Physicians still lack consensus on the meaning of race. When the *Journal* took up the topic in 2003 with a debate about the role of race in medicine, one side argued that racial and ethnic categories reflected underlying population genetics and could be clinically useful.¹ Others held that any small benefit was outweighed by diagnostic algorithms and practice guidelines that adjust or “correct” their outputs on the basis of a patient’s race or ethnicity. Physicians use these algorithms to individualize risk assessment and guide clinical decisions. By embedding race into the basic data and decisions of health care, these algorithms propagate race-based medicine. Many

A Comical Example

“In a January 2023 interview with BuzzFeed News, a spokesperson from Stability AI explained that “within AI datasets, human images display hands less visibly than they do faces.”

To successfully depict hands and fingers, AI would need more reference photos with hands as the main focus.” – Britannica.com



no context memes ✓
@weirddalle · Follow



Everyone: AI art will make designers obsolete

AI accepting the job:



2:20 PM · Jan 22, 2023



113.9K



Reply



Copy link

Read 243 replies

Artificial Intelligence: Risks

- Wide impact potential, acceleration of existing risk (data privacy & security)
- “Explainability” and Transparency
- Bias and Liability/ accountability
- Deployment: administrative vs. clinical setting
- Hallucinations
- Regulatory / Compliance
- Med Mal





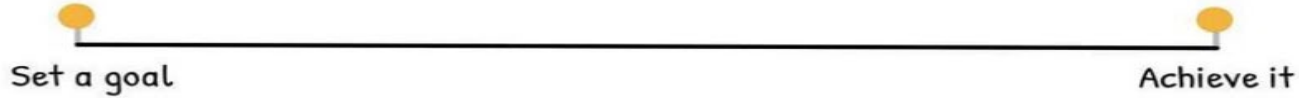
Where Do I start?

Digital Strategy and Roadmap

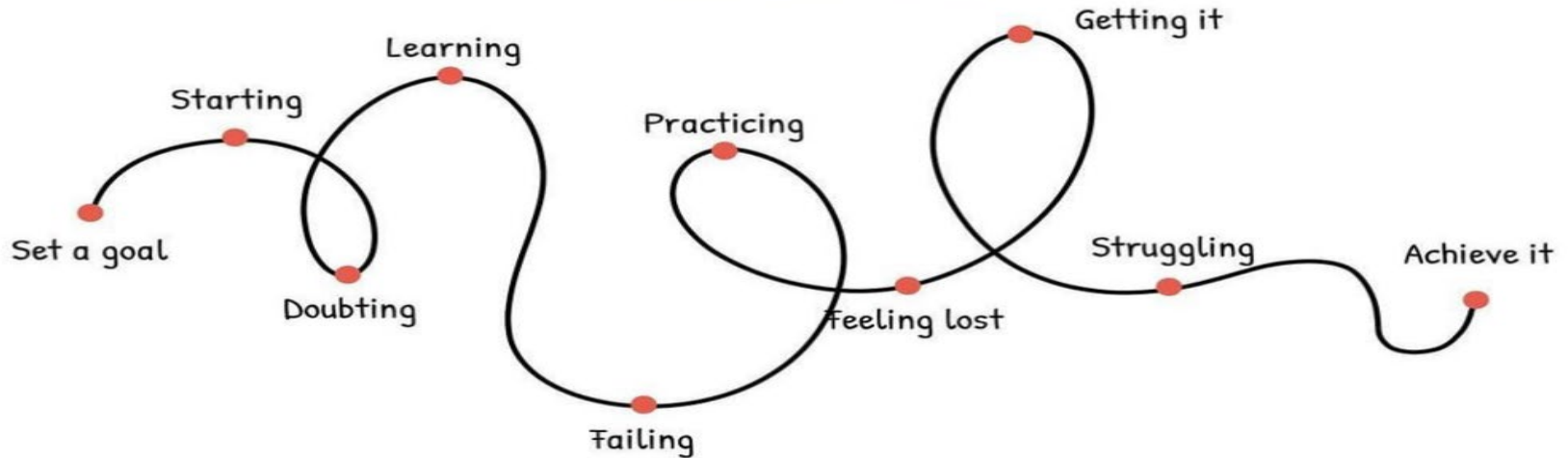


Digital Transformation Journey

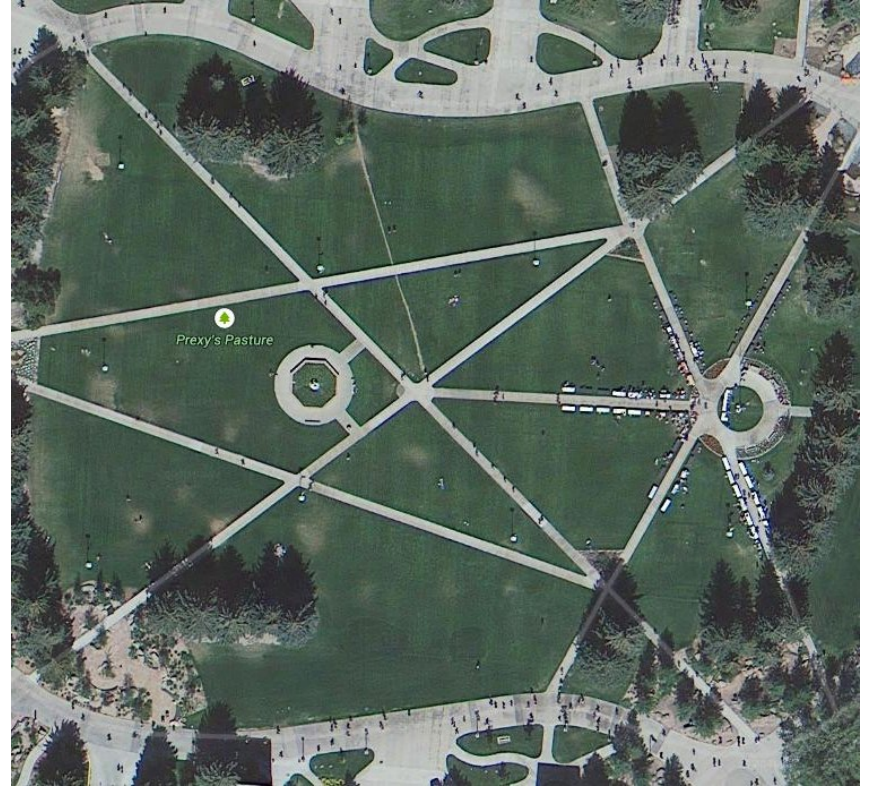
How we want it to be



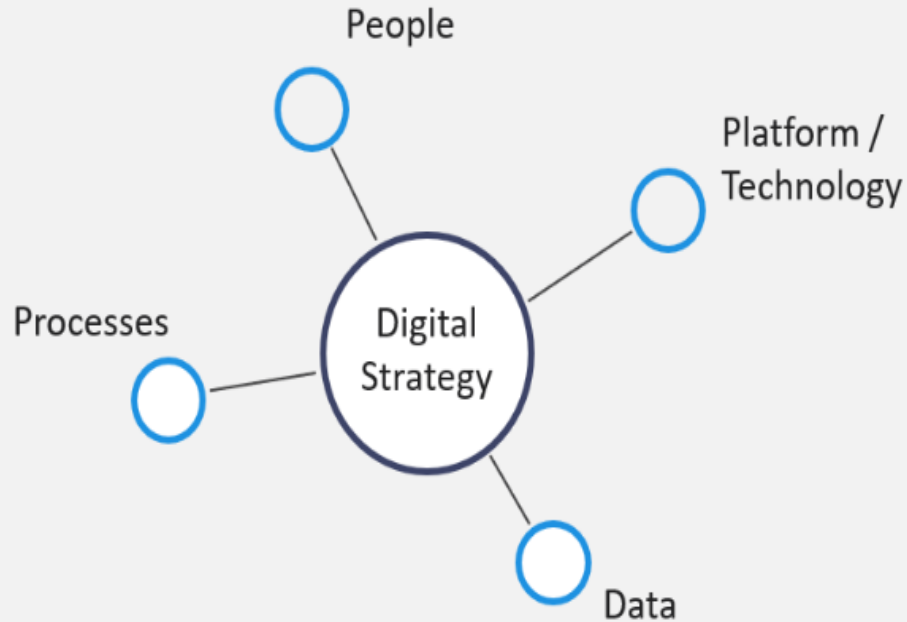
How it actually is



Start With End in Mind

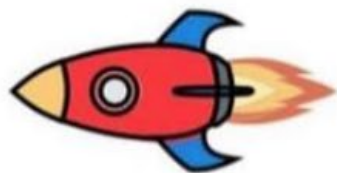


Integrated Approach



- Which do you trust the most?
- Which do you trust the least?
- Why?





FAST IN THE WRONG DIRECTION

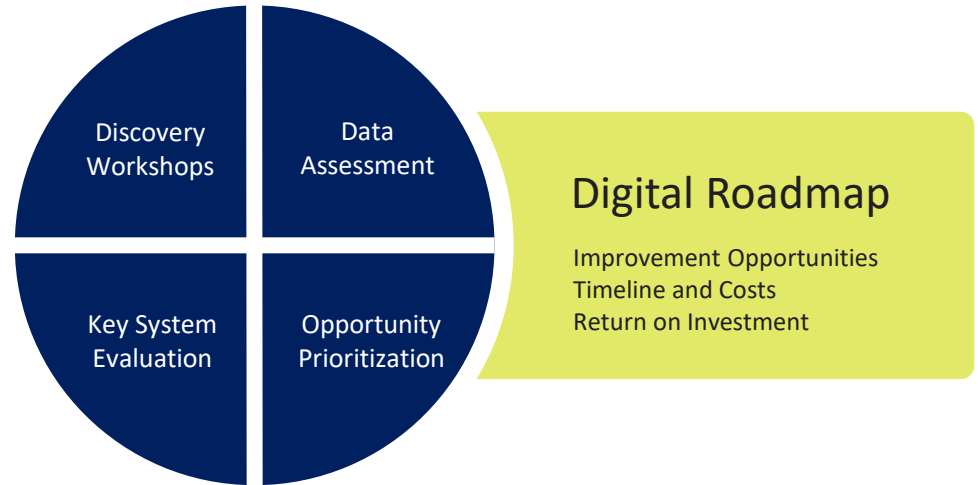
I HAVE A FEELING
WE'LL GET THERE FASTER

SLOW IN THE RIGHT DIRECTION





Getting Organized: Digital Strategy + Roadmap



Is your
Infrastructure
ready to be
“plugged in” to
AI?



Infrastructure Sets Stage for AI

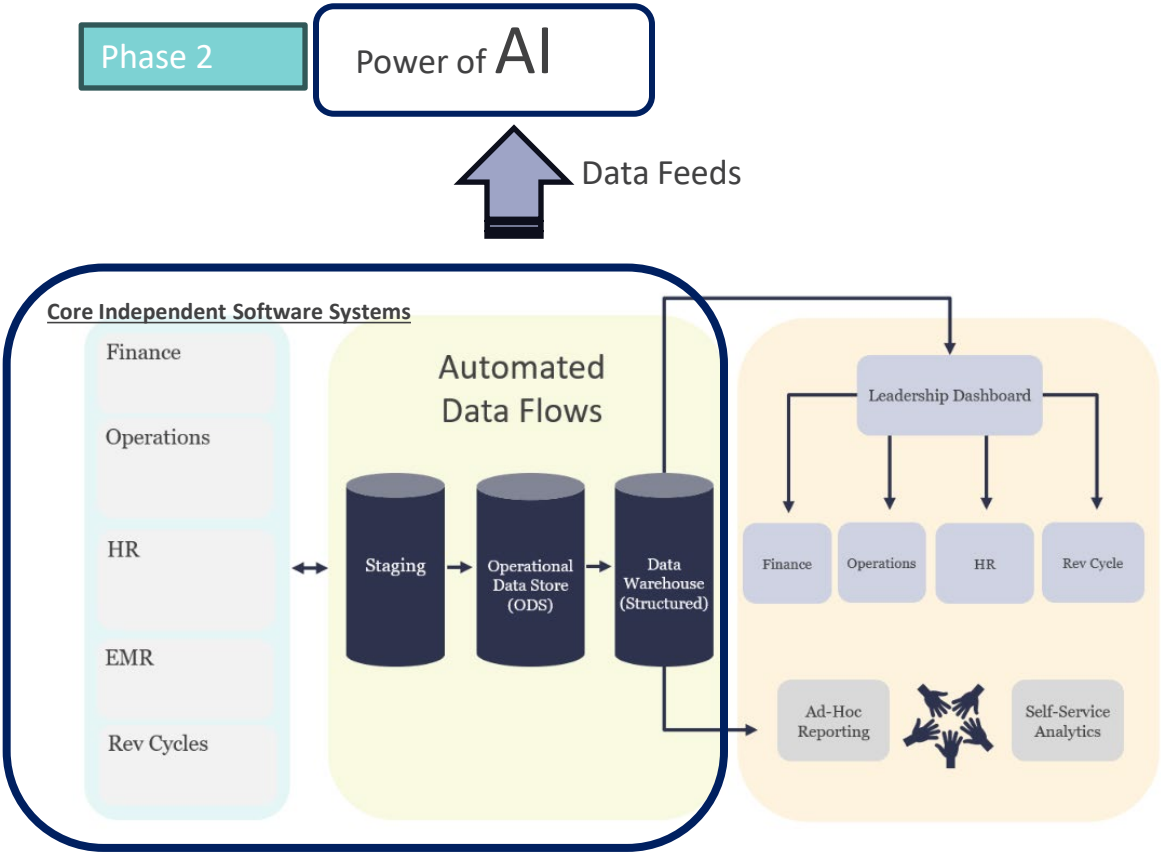
Phase 2

Power of AI

Data Feeds

Phase 1

Foundational Infrastructure



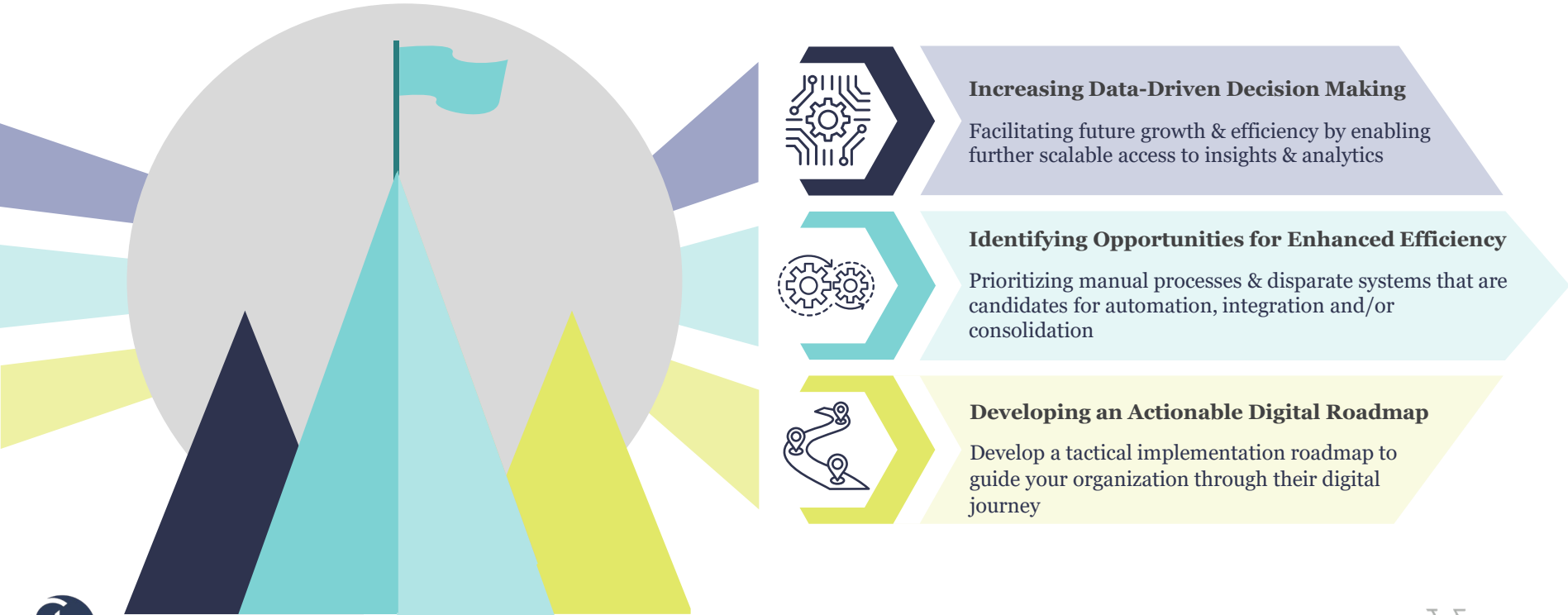


Example: A Successful Journey



Success Criteria

EXAMPLE



Key Themes Identified

During the assessment, the CLA team identified a variety of key themes & opportunities for improvement within the digital environment.

Systems



- Several best-in-class tools deployed
- Many disparate, disconnected, overlapping systems
- Minimal automated workflow support within applications
- High ongoing subscription costs
- Key gaps in system functionality

Processes



- Heavy reliance on manual action to execute core reporting and ETL
- Multiple instances of manual data entry, with a high level of effort required
- Manual efforts increases risk of error
- Many processes rooted in institutional knowledge; difficult to scale and replicate

People



- Great team of professionals, just stretched thin
- Communication highly siloed creating organizational continuity risk
- Turnover frequency has created significant capacity constraints resulting in stressed resources
- Lack of shared vision for tools and SOPs

Data Insights



- Extremely data-rich organization, just struggles to make effective use of it
- No uniform access to data or insights across the org
- Missing single source of truth
- Effort required to arrive at quality data is excessive
- Lack of organizational consensus for which KPIs are most important



Systems Inventory & Key Observations

CLA has reviewed a number of the systems leveraged by the team and detailed their use-cases & key observations below:

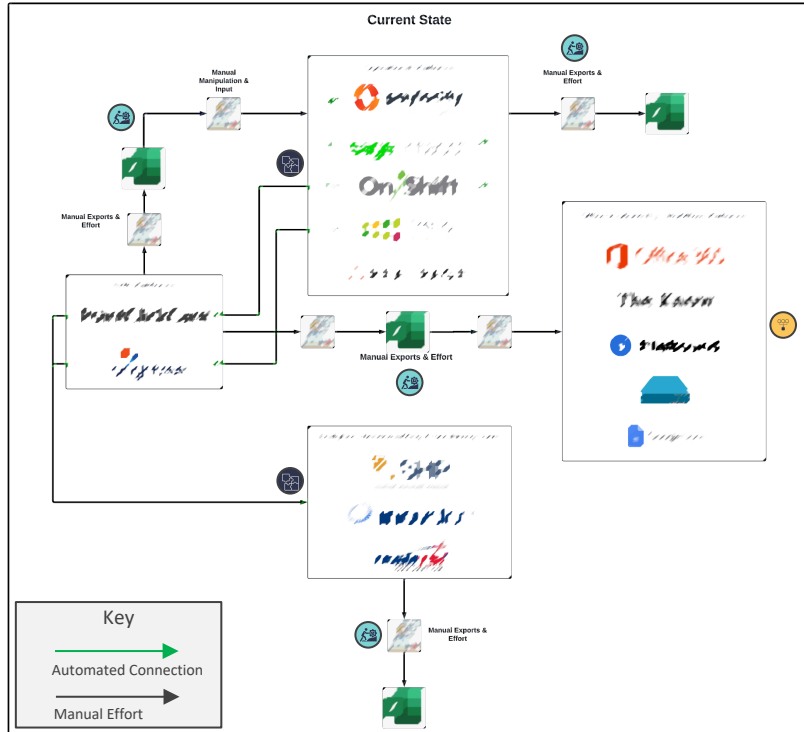


System	Core System	Use Case	Observation(s)	
	✓	EHR - Home & Community Based Services	●	
	✓	EHR - Skilled Nursing, Ind. & Asst Living	● ●	
	✓	HRIS / Payroll	● ● ●	
	✓	Financial Package / General Ledger	● ● ●	
	✓	CRM - Referral Focused	● ●	
	✓	Office Productivity Suite		
		Document Management & Workflow Automation	● ●	
		Onsite Document Management	●	
		Document Collaboration	●	
		Knowledge Repository	● ●	
		Data Aggregation & Benchmarks	●	
		SNF Analytics Tool	●	
		SNF Analytics Tool	●	
		✓	Workforce Management / Shift Scheduling Tool	● ● ●
		✓	Affordable Housing Tool	



Digital Current State Overview

CLA has documented the current state systems diagram and outlined the associated key observations below:



Some Existing Systems Integrations

- Several core systems have existing integrations in place facilitating streamlined workflows
- Still opportunity to enhance integrations to support optimal workflows (Ex – Paylocity/OnShift, Intacct/PCC, etc., Power BI for analytics)

Persistent Manual Data Extraction / Manipulation Required to Execute Core Processes

- Numerous observed points of required manual data extraction / manipulation that can potentially be automated / streamlined

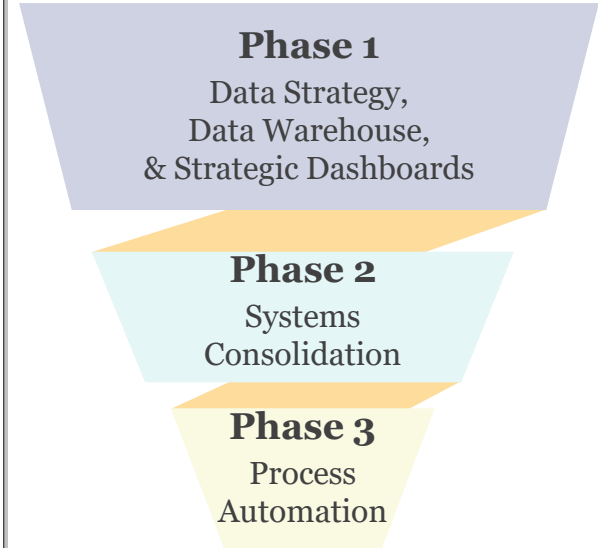
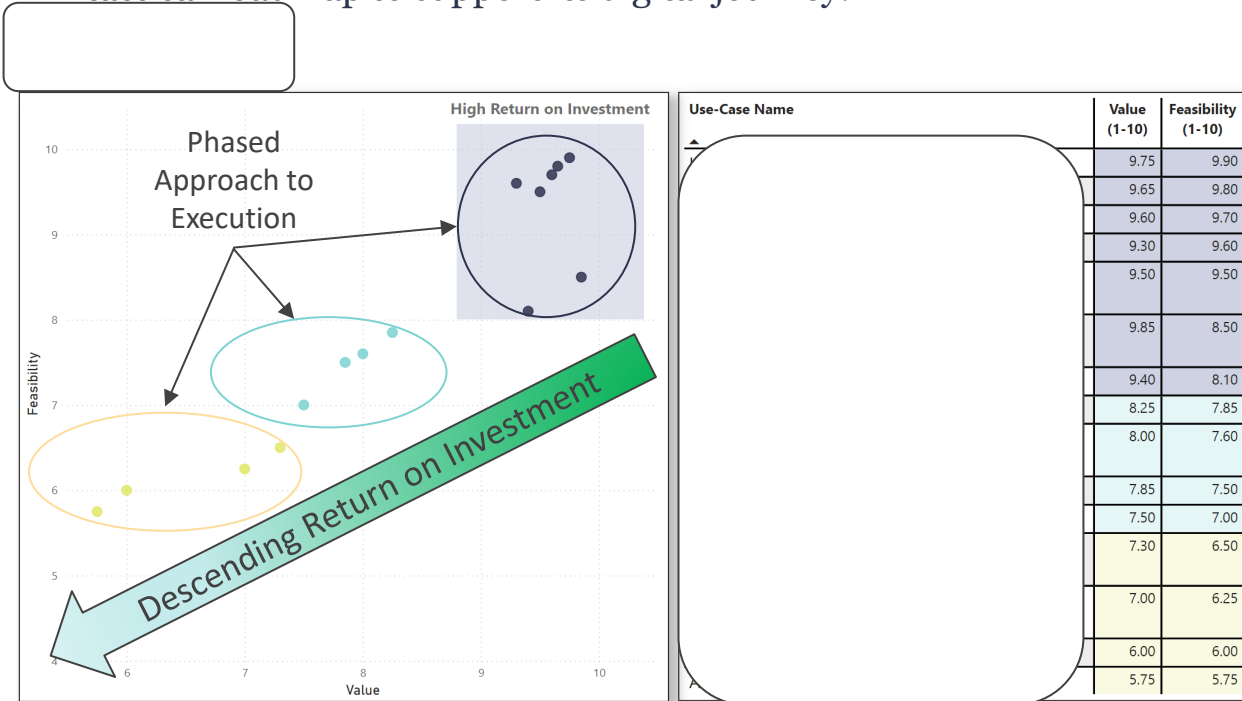
Office Productivity Platforms Represent Significant Consolidation Opportunity

- Office 365 represents opportunity to consolidate document storage, workflow management, internal file sharing / collaboration & knowledge management repository & analytics solutions into single platform



Use-Case Prioritization Matrix

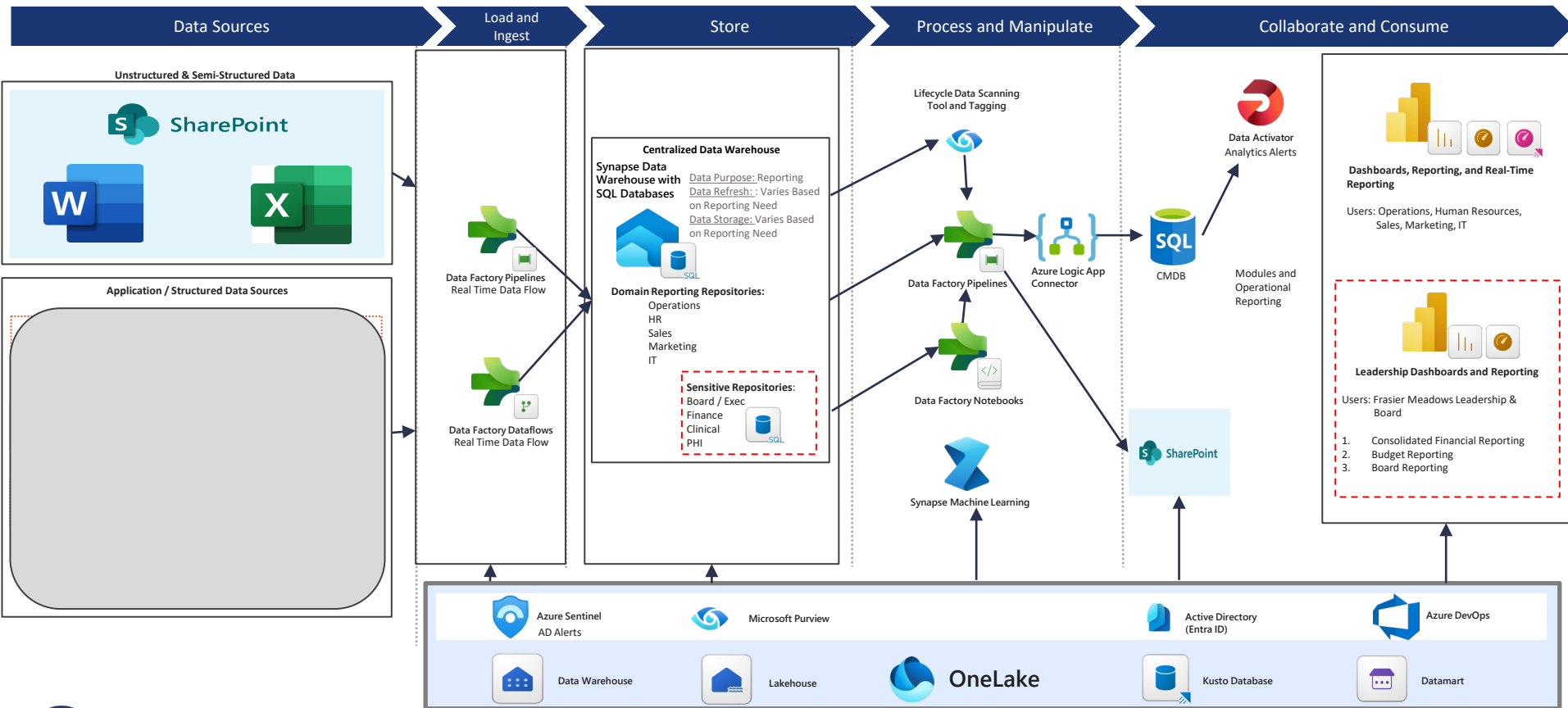
Having identified and aligned the core digital opportunities for your organization, CLA has developed the following matrix to prioritize use-cases that will enable the organization to execute a tactical roadmap to support its digital journey.



Proposed Future State – Microsoft Fabric



Auto flow





In Summary

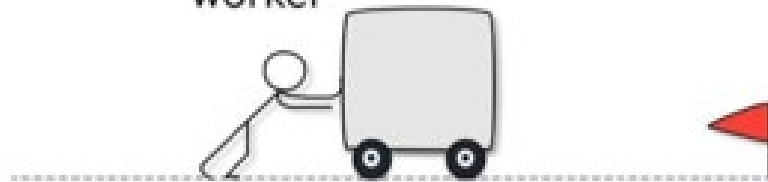


*“The future
belongs to
those who
prepare for it
TODAY”*

Hard worker



Smart
worker

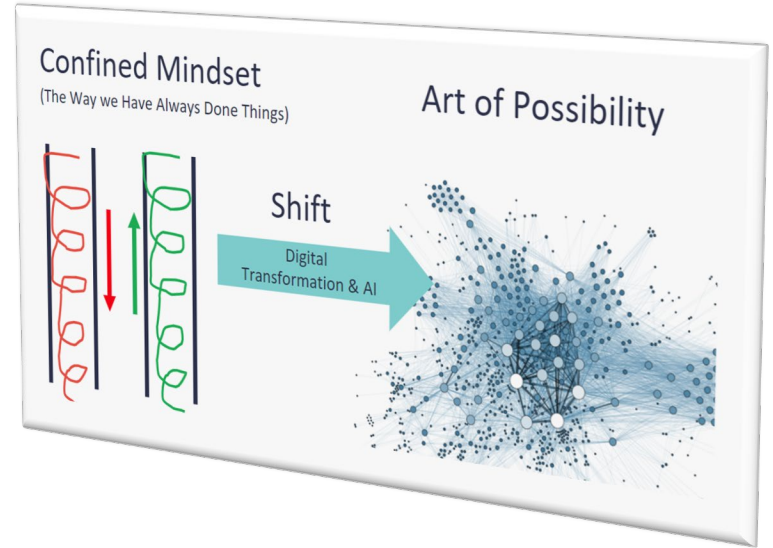


Figures out a
faster way



Summary

- Don't Get Left Behind
- Get Your Foundation In Order
 - Start Small but Start!!
 - Digital Strategy +
 - Roadmap to Execution
- It's a Journey
- Culture / Curiosity / Courage
- Cybersecurity



AI is Not About Technology

It's About *Empowerment*



AI Success Will Come to Those Who Are
Willing and Able to Think Differently



Questions & Discussion

Additional Resources:

<https://godigital.claconnect.com>





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