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dallas
TECHNOLOGY
SYMPOSIUM
2025
TITLE SPONSOR
workday
EVENT SPONSOR
HOLMES MURPHY
Navigating the Digital Frontier:
USING TECHNOLOGY TO INCREASE CORPORATE VALUE

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Navigating the Digital Frontier:
USING TECHNOLOGY TO INCREASE CORPORATE VALUE
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workday
Session 1: Technology for Business Benefits and Risk Management
Thomas Carlson
VP Finance
GridSite Technology
Jeff Crume
Distinguished Engineer
Master Inventor, IBM
Sarah Mohrle
Senior Advisor
OakTruss Group
Joe Wilson
Global CTO
Workday
John Medellin
CTO
Mede-Arc (moderator)

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workday.

Thoughts on ERP (and what to look for)

Joe Wilson, Global CTO

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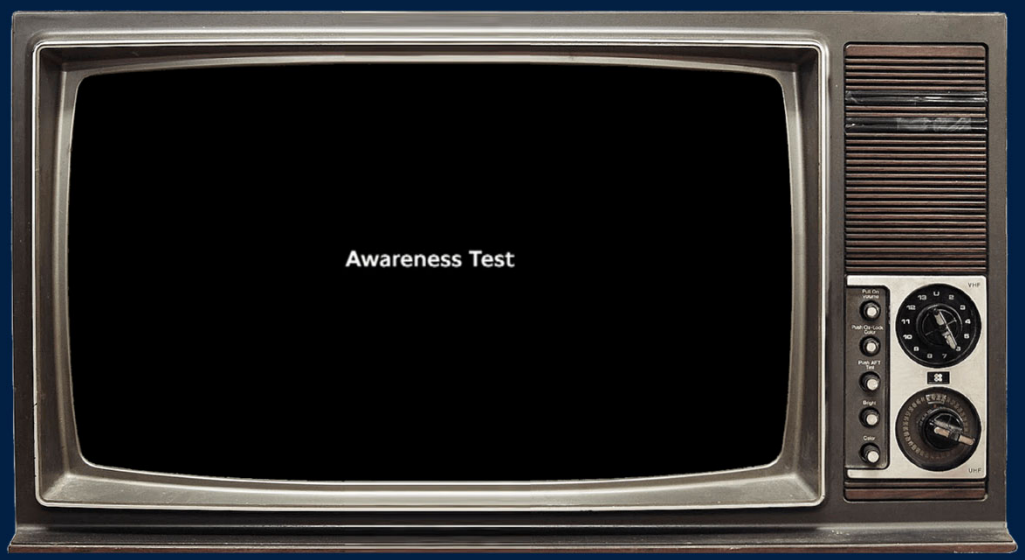

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“

it’s easy to **miss something** you’re not looking for

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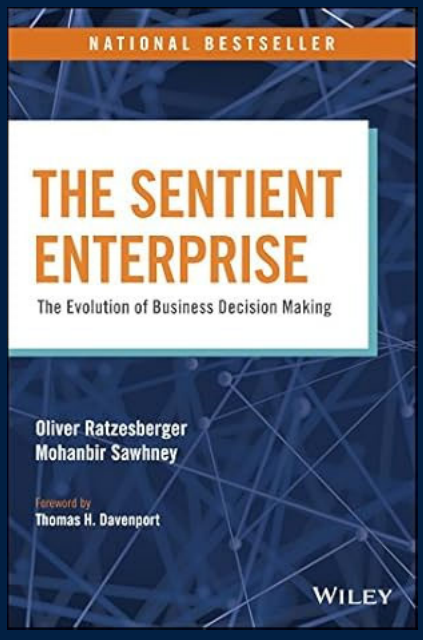

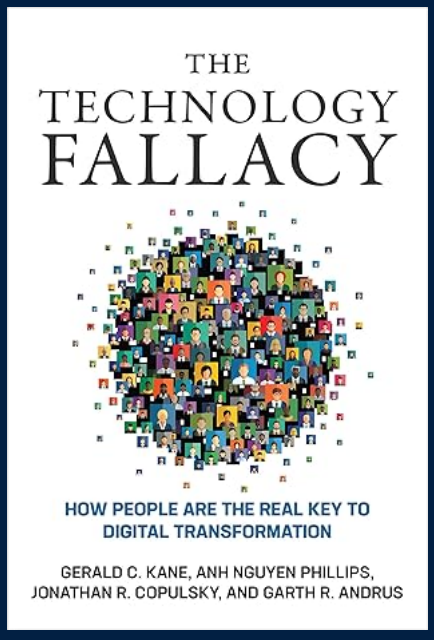

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Success today requires navigating a constantly expanding data universe, and **companies that don’t fully embrace the data available to them are operating on borrowed time.**

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... take a look at most any traditional business intelligence (BI) tool or dashboard, and you're often left with a sense of **‘Now what?’**

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… any sustainable plan for improvement requires that we **reimagine how people, processes, and technology all come together** around data.

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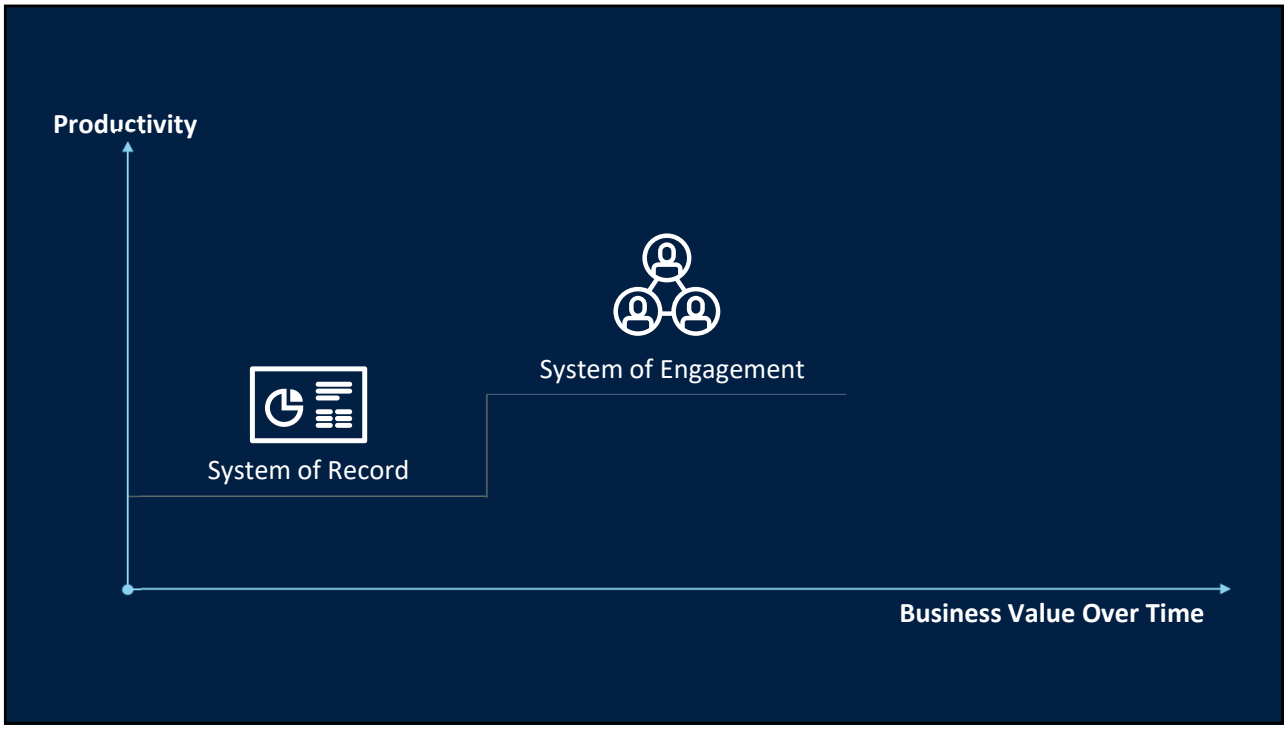
Productivity
System of Engagement
System of Record
Business Value Over Time

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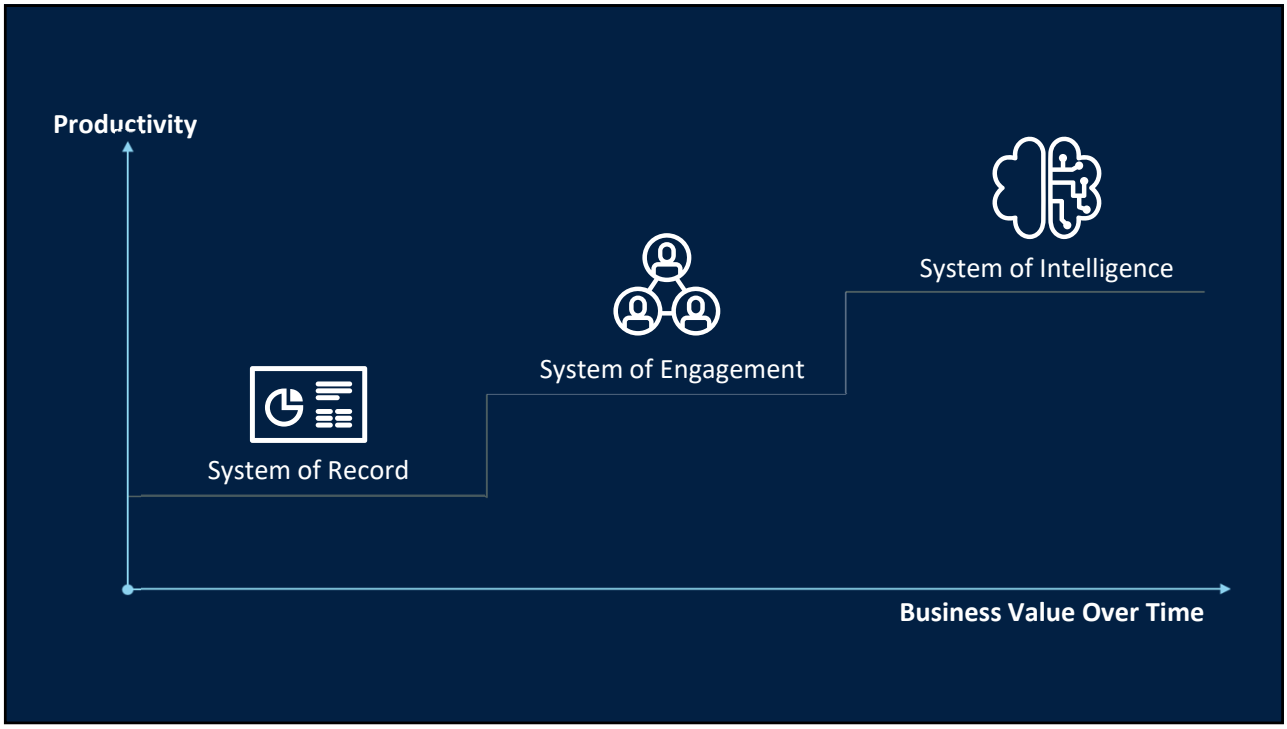
Productivity
System of Intelligence
System of Engagement
System of Record
Business Value Over Time

14

“

Work on things that are likely to be relevant to **many possible futures**.

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“

it’s easy to **miss something** you’re not looking for

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- 100% encryption at rest – native, pervasive, no cost
- 100% audit for every transaction
- Certifications and Audits (e.g. ISO, AICPA, etc.)
- No “backdoor” access to persistent data stores
- Transport Layer Security (TLS) for all traffic

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- Security
- Availability
- Processing Integrity
- Confidentiality
- Privacy

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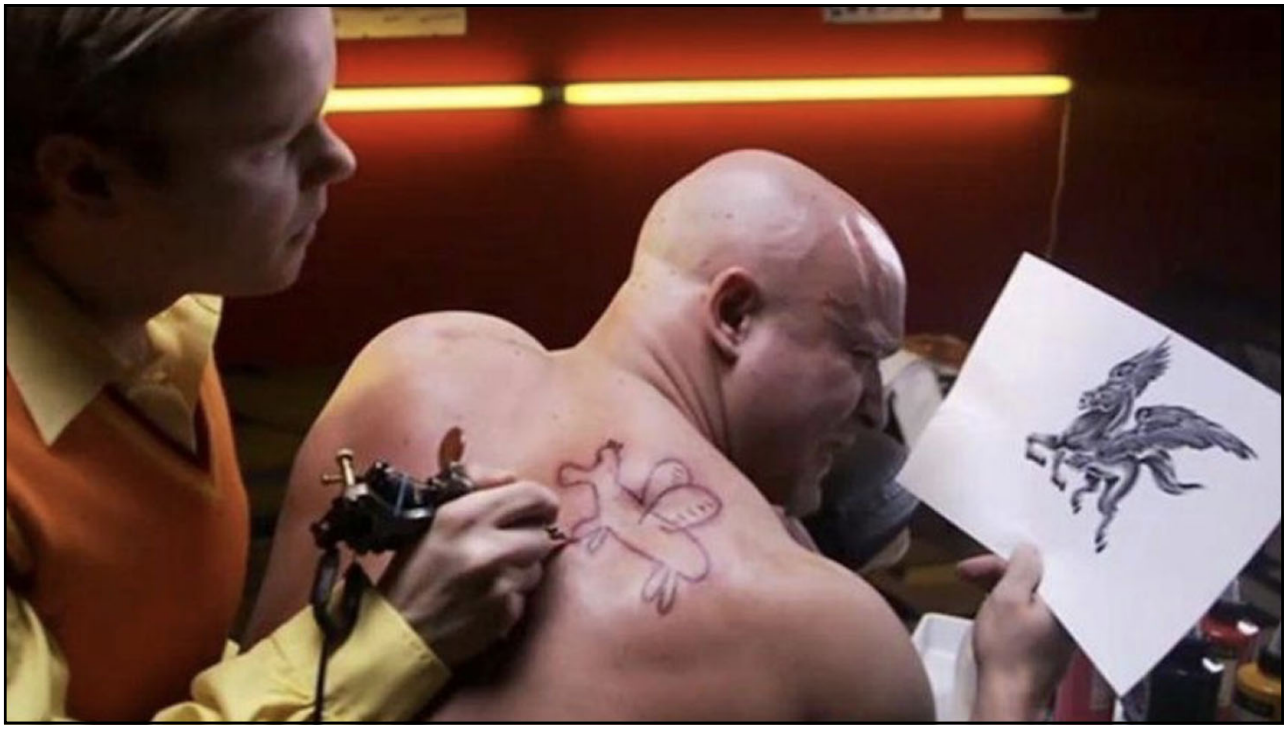

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Commercial real estate, the edge, and the future of data center development

Thomas Carlson

VP Finance
GridSite Technology

25

Data centers are contributing to sea changes in the US economy

By 2030 in the United States alone, we expect…

$1.8 Trillion

Data center capex, which will account for

11.7%

Of total US power demand

Data center investment accounted for

92%

Of US GDP growth in the first half of 2025

Sources: BCG, McKinsey, CRE Daily

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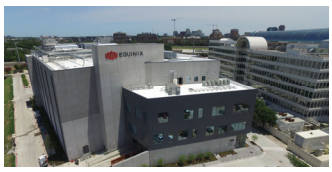
What we talk about when we talk about data centers

Hyperscale

- **Size:** 100+ MW
- **Location:** Exurban / rural to optimize land and power cost
- **Operator profile**: owned and operated by a single tenant (e.g., Google)
- **Use case:** High-density (50-100+ kW/rack) AI training and core cloud
- **Market share:** Over 80% of new capacity



Colocation (wholesale/enterprise)

- **Size:** 10-100 MW
- **Location:** Suburban & carrier hotels to optimize power and fiber access
- **Operator profile**: Comprised of multiple tenants (large enterprises, governments, and tech companies)
- **Use case:** Mix of traditional low-density enterprise data storage (5-15 kW/rack) and newer high-density AI clusters
- **Market share:** 15% of new capacity

Edge

- **Size:** <10 MW down to several hundred kW
- **Location:** Urban / regional hubs to optimize proximity to users
- **Operator profile**: Comprised of multiple tenants, including Content Delivery Networks, telcos, IoT, and cloud providers for regional access
- **Use case:** High-density, focusing on real-time data processing, caching, streaming
- **Market share:** <5% of new capacity, though growing at a greater pace

Sources: Data Center Dynamics, RLG Construction Engineers, Data Center Magazine

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Though demand continues to increase, hyperscale developments could face economic and political headwinds

Market Overbuilding Concerns

Tech giants, which comprise most of the spending, face prospect of low returns on assets if revenue generated from capex investment doesn't grow substantially

Moody's: "Uncertainties over future computing needs may pose long-term credit risks"
Common Dreams: "Warnings of an AI bubble grow louder"
Goldman Sachs: "AI bubble concerns are back amid a rise in AI-exposed companies' valuations, ongoing massive AI spend, and the increasing circularity of the AI ecosystem"

Power Infrastructure Bottlenecks

Electrical grid interconnection delays, utility congestion, and lengthy permitting timelines create significant barriers

EESI: "Data center energy needs could upend power grids"
Lawrence Berkeley National Lab: "The US generation interconnection queue is twice its installed capacity"
Brookings: "The increase in power demand by data center developers is at a scale not previously seen in the United States"

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Edge data center deployments, leveraging commercial real estate conversions, are attracting more investment

What makes edge data centers compelling?

Smaller 0.5–10 MW edge facilities can cost between 30-35% less on a per-megawatt basis and achieve a 50% reduction in time to market

- Existing power infrastructure
- Appropriate zoning
- Strategic location

Ideal property types

- Warehouses
- Flex/industrial buildings
- Suburban office spaces
- Pad sites

Sources: Vertiv, Data Center Dynamics

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Local CRE owners could still join the party

Dallas-Fort Worth presents a convergence of factors that could make it well-suited for edge data center development

DFW Market Advantages

- Under-utilized office and industrial can be repurposed into edge nodes
- Strong AI and cloud computing demand in the region creates robust tenant appetite for 500 kw-5MW sites

The Timing Factor

As more investors recognize the edge data center opportunity, competition for well-positioned sites will intensify

Early movers benefit from:

- First access to tenant relationships
- More favorable power interconnection terms
- Higher returns before market compression

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The Convergence: Cybersecurity and AI

Dr. Sarah Mohrle
PhD Quantum Physics and AI Patent Holder

www.oaktrussgroup.com

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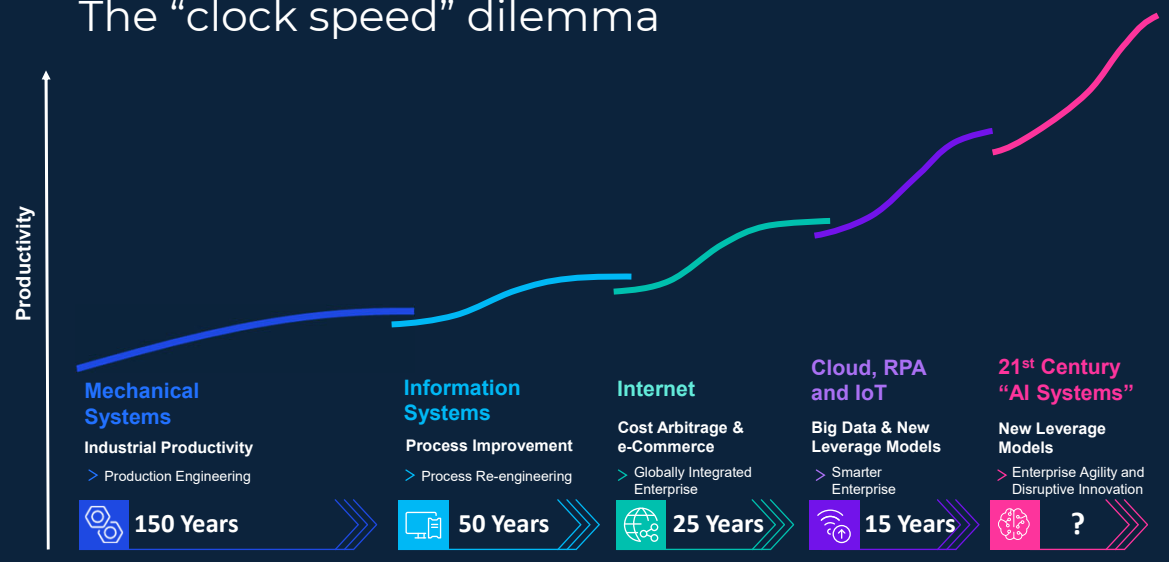
The "clock speed" dilemma



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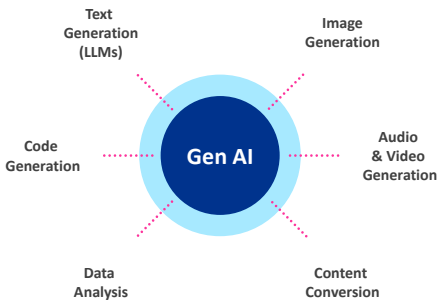
Predictive AI (GenAI) change the game in 2022…

GenAI is a type of AI that can generate content (text, images, audio, code etc.) from prompts

- GenAI is an evolving subfield of AI capable of generating highly personalized and tunable content.
- GenAI models are trained using various AI and machine learning techniques designed to analyze patterns in text, audio, code, images, and videos.
- Large Language Models (LLMs), such as GPT4, Llama 2 etc., are trained on a vast body of corpus.
- LLMs respond to "prompts" that are typically text but can also be multi-modal including images and audio.
- Generated content may suffer from HACK - hallucination, accuracy, cohesiveness, knowledgeability.



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The New Digital Imperative — AI & Cybersecurity Must Converge to Evolve

AI Expands the Number of Attack Surfaces and Data

- Model bias & drift
- Data poisoning
- Vulnerable APIs
- Logic-based attacks
- Unintentional AI*

AI + Cyber = Smarter, Safer, Scalable

- Secure-by-design AI
- AI-powered SOCs
- Zero Trust Ecosystem
- Unified governance
- Executive Sponsorship
- Board engagement

AI-Enabled Cybersecurity Must Defend at Machine Speed

- AI detects anomalies
- Simulates attacks
- Automates response
- Reduces reaction time

* The rapid spread of AI across business units has introduced a new, often overlooked risk: **"Unintentional AI"**. This arises when AI capabilities are embedded into enterprise systems without formal security oversight. Two risk vectors are most prominent. First, core platforms previously cleared through security reviews may acquire new AI features through updates or integrations, creating vulnerabilities that go unchecked. Second, employees now use embedded AI tools in routine workflows—such as forecasting in ERP systems or analyzing data in CRMs—often exposing sensitive information in ways traditional controls fail to anticipate.

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What is (Now) Next?

- The attack surface has changed; it is shifting under Enterprises feet like quicksand and Zero-Trust architectures are more important than ever.
- AI opens “Superhighways” to data that was protected by platforms and people in the past.
- The attacks of the *now* are at Agentic machine speed; normal Enterprise strategies protecting traditional infrastructure are becoming obsolete.
- Quantum is on the horizon for “normal” corporate enterprises; monitoring and the traditional security paradigm of “moat and castle” will fall quickly.

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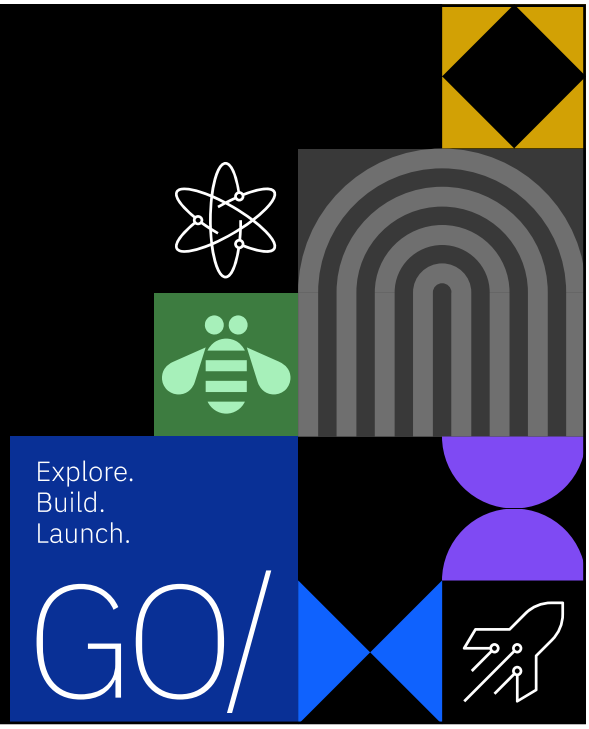
Emerging Tech Trends

Jeff Crume, PhD, CISSP
Distinguished Engineer
IBM Master Inventor
NCSU Adjunct Professor



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https://www.youtube.com/watch?v=CMHL1bPtQdI&list=PLdw2bVqUvsk2PnreCdr5uDZ1CjwvQScKe&index=8&t=235s

- Cybersecurity Architecture
- AI Threats
- Quantum Safe Crypto
- Ransomware
- Phishing
- Hacking
- Zero Trust
- Incident Response
- XDR
- Multi-factor Authentication
- PKI
- More to come…

https://www.youtube.com/playlist?list=PLdw2bVqUvsk2PnreCdr5uDZ1CjwvQScKe

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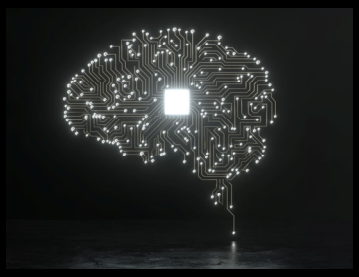
Two Big Tech Trends



AI

Quantum Computing

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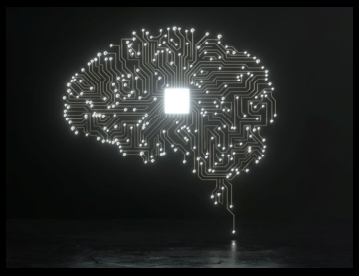
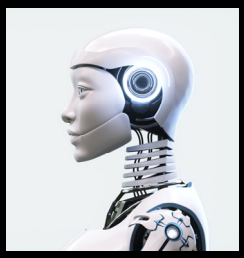
AI Trends



AI

- AI Everywhere
- Hallucinations
- Attacks on AI
- Attacks by AI
- Agents
- Jobs?
- Education?
- Skills?

https://www.nytimes.com/2025/10/28/style/48-hours-without-ai.html



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The Quantum Menace

Harvest Now

Decrypt Later

Quantum Computing

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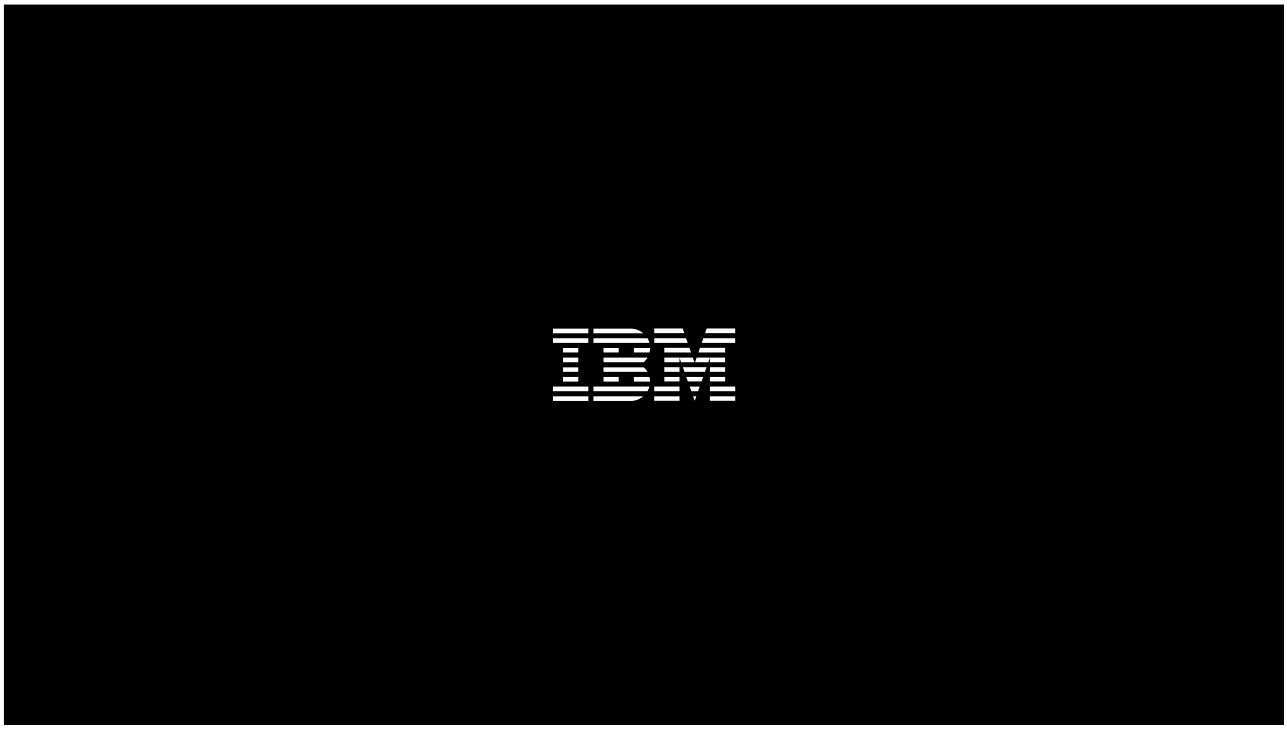

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