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Fear or FOMO

Examining the Future of AI In Healthcare

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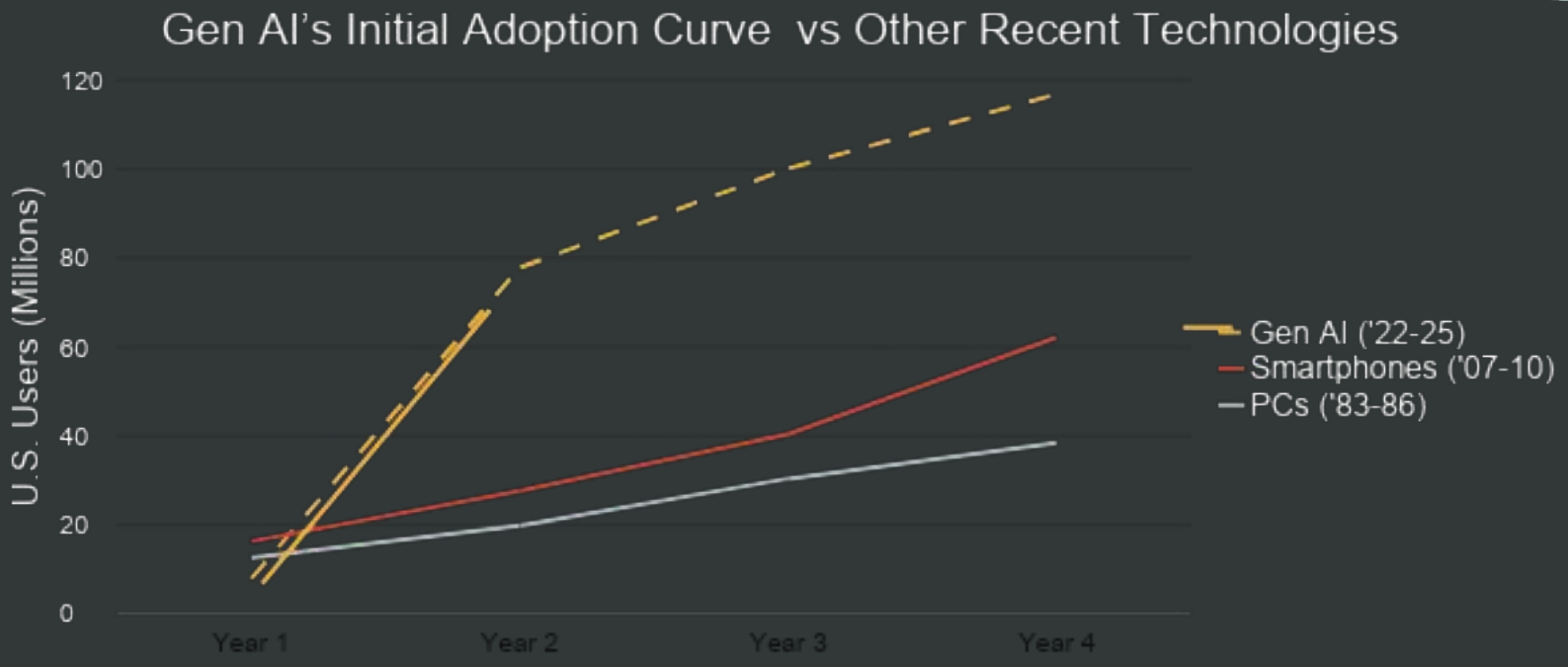
April 8, 2024

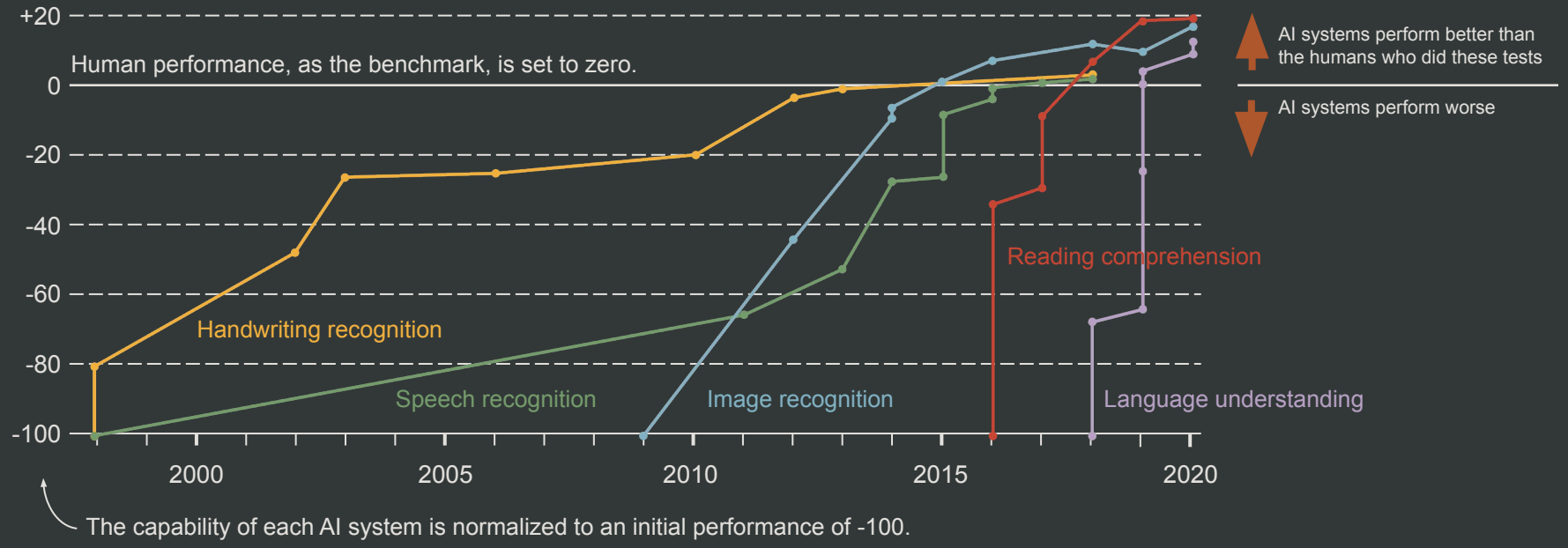
AI adoption is growing rapidly



Sources: Insider Intelligence and ITU

AI capability is growing rapidly too

Test scores of the AI relative to human performance



Artificial Intelligence is not new

AI is a half-century old discipline where machines are trained to think and act like humans

Classic AI

Carries out tasks and makes predictions

Recognizes patterns in a set of data

Uses what it learned to make predictions on new data

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Generative AI

Creates something new.
Can be audio, text, or imagery.

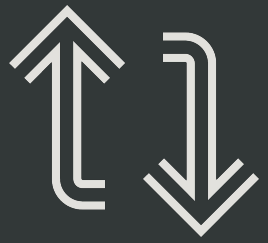
Recognizes complex, multi-dimensional patterns based on a massive data set

Generates something new that is similar to the training data set

Generative AI is a *transformational* new technology

	Traditional AI	Generative AI
Providers	• Clinical decision support • Image analysis (identification, segmentation, quantification in radiology, cardiology, pathology, etc.) • Early warning to prevent adverse outcomes (e.g. sepsis) • Risk scoring for specific patients (ED, ICU, etc.) • Prediction of complications • Patient matching for clinical trials	• Clinical notes summarization (care coordination) • Post-discharge instructions generation • Improve employee experience through chatbots • Referral letter generation • EHR integration: pre-populate patient record with relevant information from outpatient visits, external sources, and new clinical research
Payers	• Fraud detection and prevention • Improve digital patient experience • Identify patients for early interventions to reduce the likelihood of more advance disease • Prescription management	• Benefits inquiry servicing • Resolution of claims denials • Streamline and improve Prior Authorizations • Denial explanation and additional information request • Structure data for payer purposes
Life Sciences	• Molecule identification for drug development • Drug discovery identification and optimization • Drug development • Patient matching for clinical trials • Compliance and patient monitoring (post approval) • Marketing optimization (post approval)	• Novel molecule generation • Protein sequence and gene design • Virtual patient generation • Text-to-image generation • Synthetic data generation • Single-cell RNA sequencing data denoising
Patients	• Symptom checkers • Activity/sleep trackers • Personal ECG monitors with early warning (e.g. arrhythmia) • Medication adherence • Personal monitoring (e.g. falls)	• Generate personalized recommendations (diet, activity) from wearable device data • Virtual doctor for remote locations with no access to human doctors • Clinical notes summarization for patients using simple terms in the patient's language

Blockers to generative AI adoption



Endless analysis

Misunderstanding model capabilities

Security and privacy concerns

Joyce's Story

- 51-year-old African American female
- Married, mother of 2 teenage daughters
- History of Myasthenia Gravis
- History of tracheostomy reversal
- New diagnosis of ovarian cancer
- Admitted to your hospital for a total hysterectomy and to start chemotherapy

Hospital Course

- Risk Stratification
- Bed Management
- Medication Reconciliation
- Supply Chain Management
- Case Scheduling

Postoperative Course

- Discharge Planning
- Quality & Performance Improvement
- Data Analytics and Reporting
- Clinical Trial Enrollment
- Referral Management

We meet you where you are

Generate continuous business outcomes with your data

Any EHR

Any Database

- Any PACS
- Any HIE
- Pop Health (HDI)
- Claims data
- External data sources
  - CDC
  - Weather
  - Health Depts

AI & ML

Generative AI

Increased operational efficiency and process automation

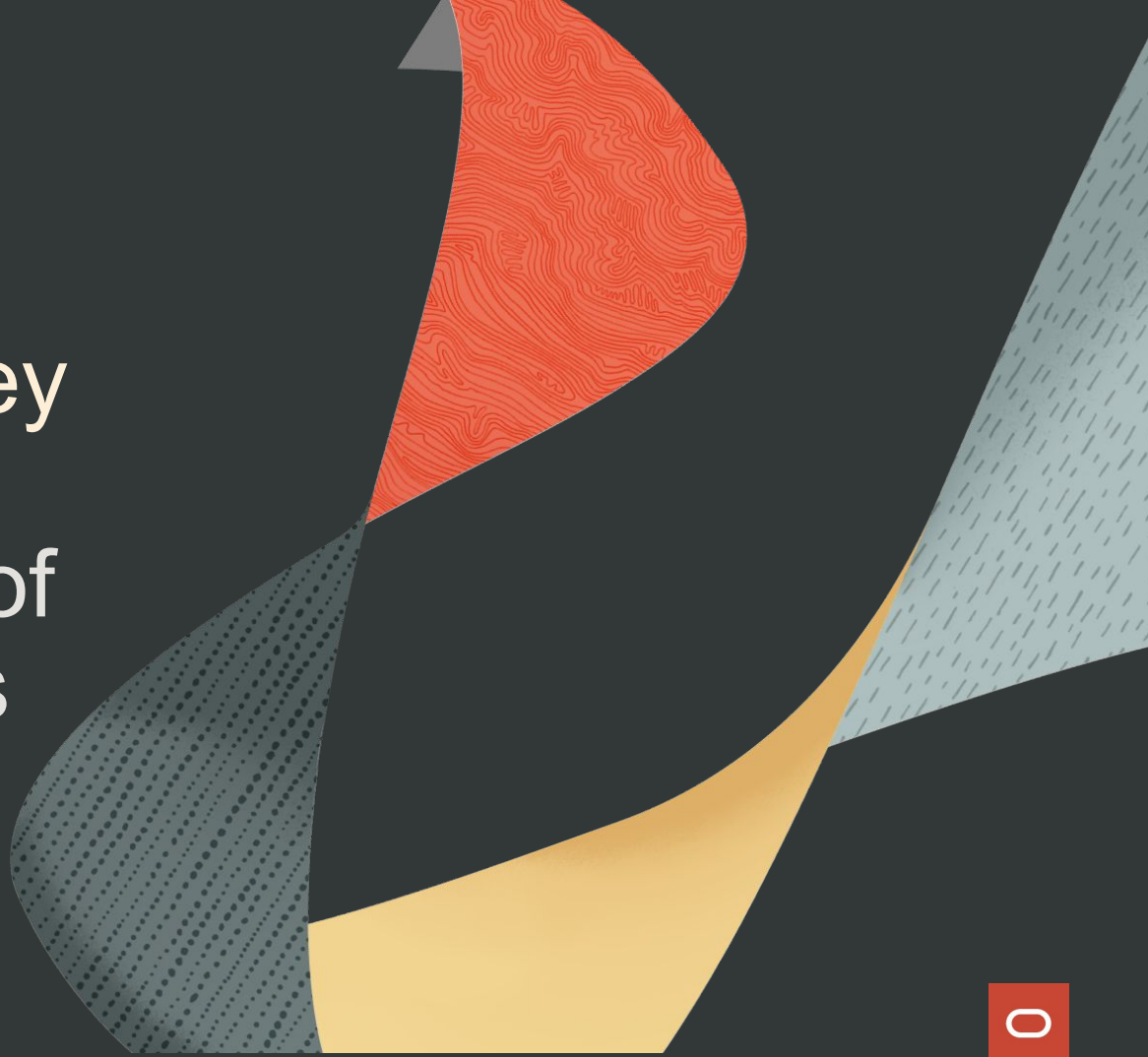
Better real-time forecasts and insights

Improve patient care and clinician experience

Better patient experience and engagement

Any data | Any application | Anywhere | Open

AI is a journey and a spectrum of possibilities



AI and the Quintuple Aim

- Conversational chatbots
- Clinical Digital Assistant
- Wearable integration
- Personalized health coaches

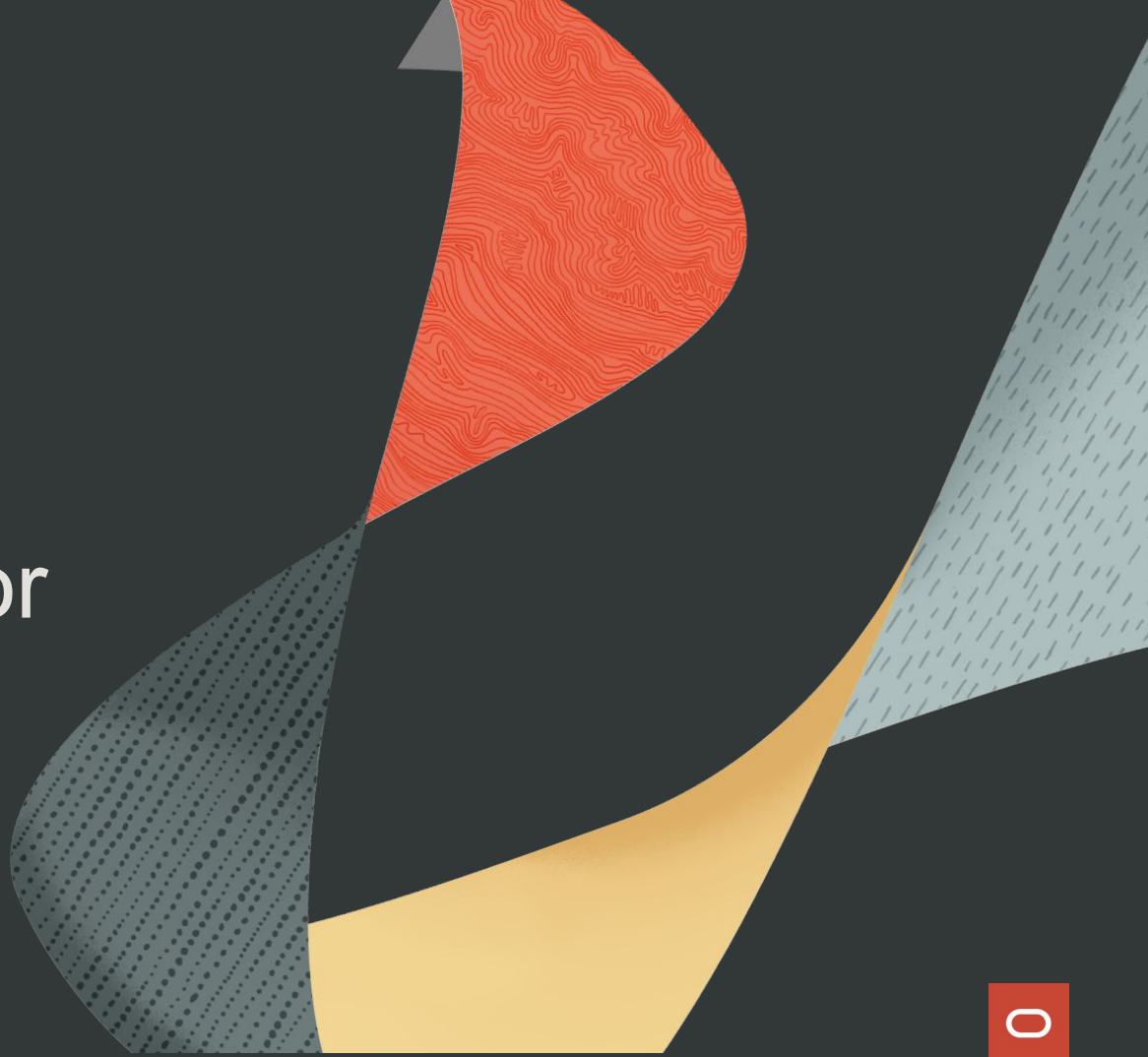
- Gen AI to break down language and accessibility barriers
- Clinical Digital Assistant
- Serving isolated and marginalized populations

- Clinical note-taking
- Clinical Digital Assistant
- Discharge summary generation
- Referral and prior authorization

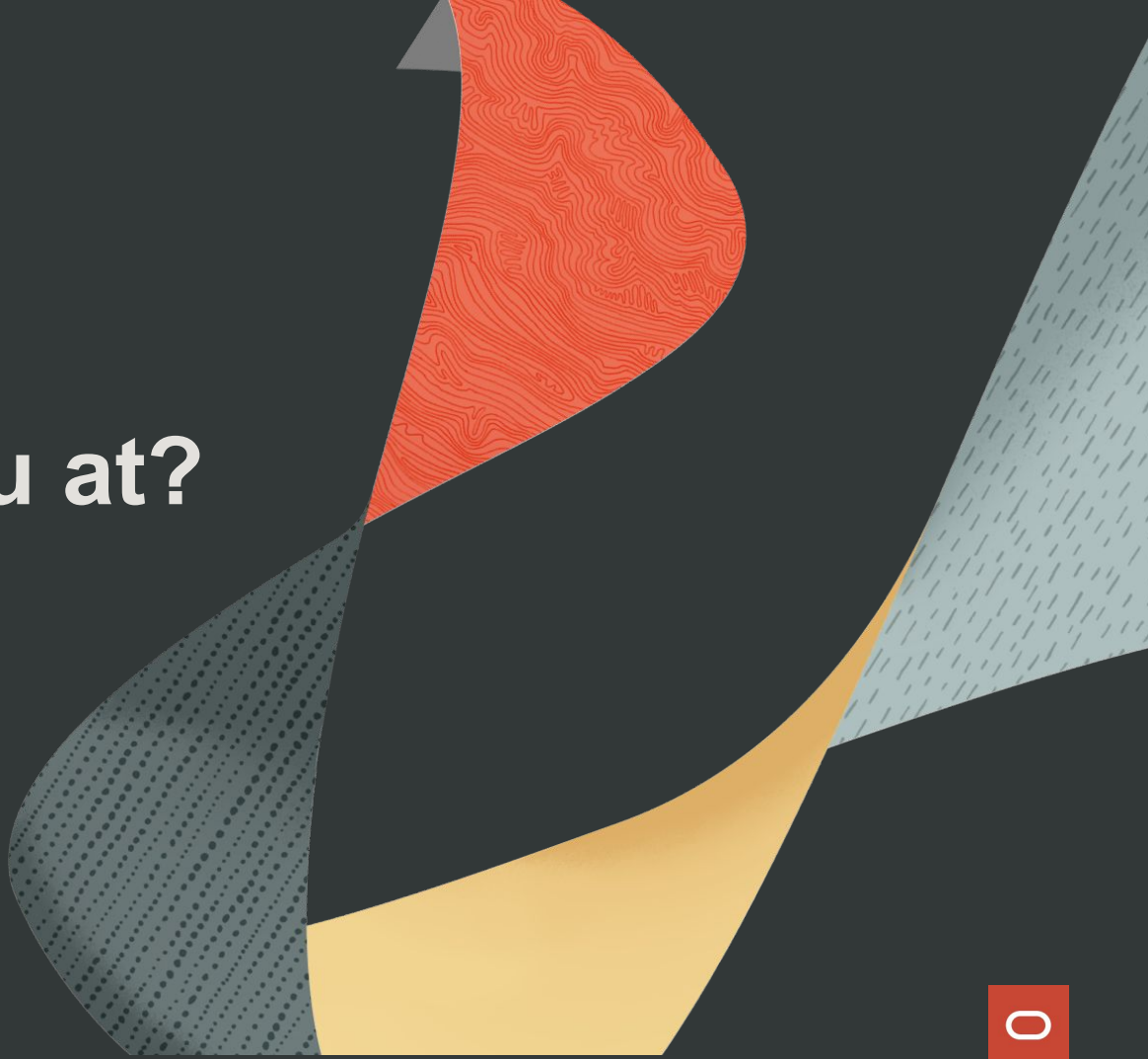
- AI-powered Clinical Decision Support systems
- AI-powered personalized medicine recommendations
- AI to streamline and accelerate clinical trials

- AI assistants for health systems
- AI to promote health education and awareness of risks at population scale

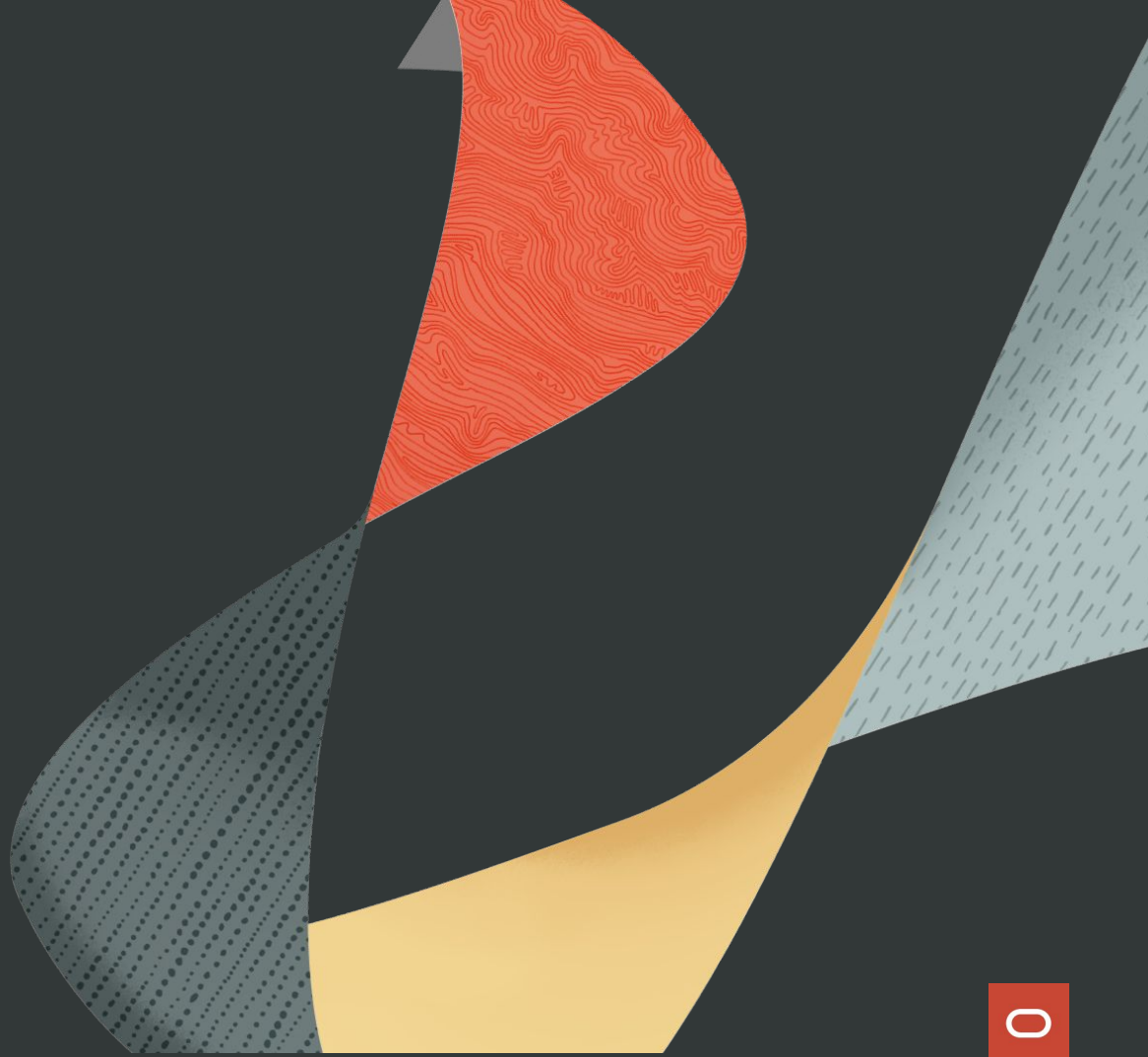
The path to successful generative AI for Healthcare



Where are you at?



Questions?



Thank you

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