Phase2 + Acquia

Start With Your Hardest Problem

Why AI Changes Everything for IT

The Problem Everyone Has Given Up On

It surfaces in every strategic planning session before being dismissed as too complex or too expensive to solve. Teams build elaborate workarounds, clinicians accept it as inevitable, and boards eventually stop asking about it.

Typical pressure points in health and wellness technology are clear: interoperability failures force staff to manually reconcile data across dozens of systems, documentation demands pull physicians away from patients and deeper into screens, and security vulnerabilities multiply faster than teams can patch them. So we have to ask, do these problems persist because they are inherently unsolvable? Or are we still operating under the assumption that progress must be linear when the scale of today's challenges demands a fundamental change in thinking?

These problems persist because traditional IT and operational models assume linear progression where every small improvement builds on the last and each step forward costs more than the previous one. Meanwhile, the problems themselves scale exponentially. In other words, we've been playing by rules designed to guarantee only incremental gains against issues that demand exponential solutions.

AI: The Moment the Rules Change

Imagine the IT ecosystem as a two dimensional game board where a player can move forward, backward, left, and right. Every strategy available on that plane has been mastered, every path has been optimized, yet the return is movement without momentum.

Now imagine discovering an entirely new direction of movement — up. The board itself hasn't changed, but the player's relationship to it has. They are no longer confined to navigating the surface. A new level has opened. The game now operates in three dimensions. Moves that once required twenty careful steps across the board can be executed in a single upward leap.

AI introduces a new axis of possibility. The data, systems, and workflows remain the same, but the ability to connect, predict, and act shifts to a higher plane. Problems that once felt unsolvable on the flat board become solvable the moment the perspective rises above it.

Why Leapfrogging Works Where Linear Progress Fails

Traditional IT solutions are expensive, time consuming, and often impossible given real world constraints. This linear progression is why the hardest problems remain unsolved because the prerequisite steps are themselves insurmountable.

TRADITIONAL IT SOLUTIONS	AI LETS YOU SKIP STEPS ENTIRELY
Standardize before integrating	**Integration without standardization:** AI understands meaning across different formats
Clean data before analyzing	**Insight from messy data:** AI finds patterns in chaos that perfect databases miss
Define all rules before automating	**Automation without rigid rules:** AI learns from examples, not exhaustive programming
Fix the foundation before building	**Building while fixing:** AI solutions improve the foundation as they operate

This isn't about AI being magic or complexity disappearing. It's about having a tool that works with complexity rather than requiring its elimination first.

The Leapfrog Effect in Action

To understand how AI enables leapfrogging, consider how traditional IT solutions create a chain of dependencies. Each link must be forged before progress can continue to the next, and any weak link breaks the entire chain. AI breaks these dependencies, allowing organizations to jump directly to outcomes that would typically require years of prerequisite work.

The following examples illustrate how health and wellness organizations are using AI to bypass traditional constraints and achieve transformative results. In each case, AI works with existing complexity to deliver value immediately.

EXAMPLE 1

The Data Governance Leapfrog

THE TRADITIONAL APPROACH

Healthcare Data Governance

For years, health and wellness organizations have negotiated an impossible balancing act with data governance: lock everything down so tightly that innovation dies, or open access and risk compliance violations, data breaches, and inconsistent information spreading across the organization.

Traditional Approaches Demanded:

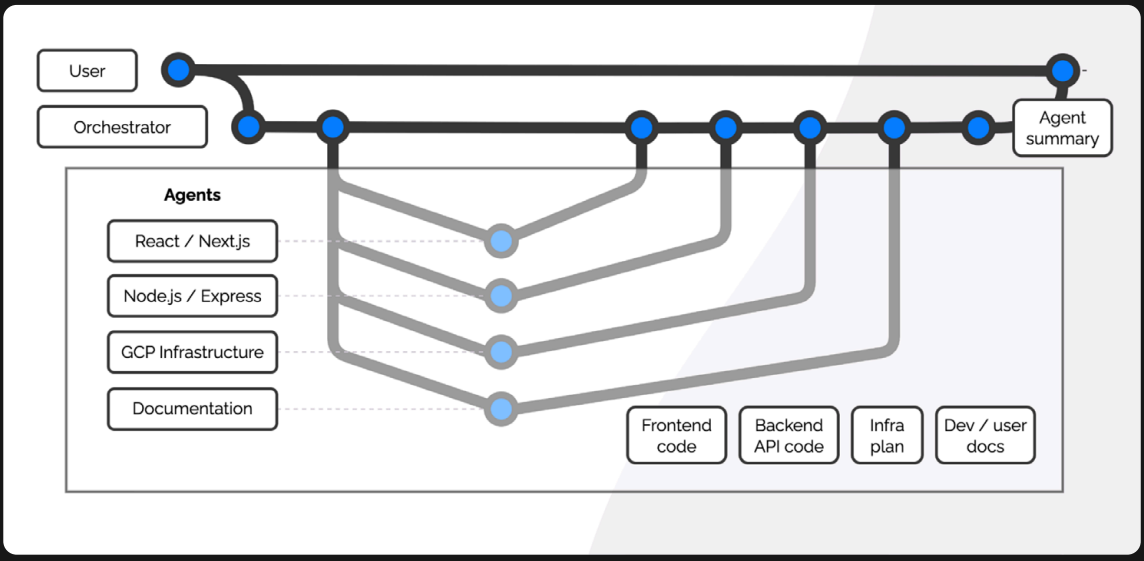
Years of data standardization efforts	Rigid approval hierarchies that slow everything	Department by department training on governance policies	Manual auditing of every data access request	Separate systems for clinical, operational, and research data

Most organizations end up with the worst of both worlds: data remains siloed AND ungoverned, with shadow IT solutions proliferating as teams work around restrictions.

THE AI ORCHESTRATION LAYER

Governance That Enables Rather Than Restricts

Instead of trying to fix all the underlying data chaos first, one health system deployed an AI orchestration layer that sits between users and data sources. Think of it as an intelligent interpreter that understands both organizational governance rules AND user intent.



For example, when a user requests data in natural language, "Show me readmission trends for cardiac patients" the orchestration layer springs into action. It instantly interprets the request and automatically verifies permissions, then deploys multiple specialized AI agents to access different systems simultaneously, pulling from EMRs, claims databases, and quality metrics platforms.

Throughout this process, the orchestration layer maintains strict governance controls: PHI is masked according to the user's role, potentially privacy violating data combinations are blocked, and comprehensive audit trails are generated automatically. The system even ensures that results align with organizational definitions so everyone agrees on what constitutes a "readmission." Within seconds, users receive clean, properly governed data without ever navigating multiple systems or worrying about compliance.

THE LEAPFROG EFFECT

- Immediate access to integrated data across all systems
- Automatic governance enforcement without manual oversight
- Innovation sandbox where teams can experiment safely
- Real time compliance without slowing access
- Self documenting audit trails for every interaction

The organization still has fragmented systems, inconsistent data formats, and evolving governance requirements. But the AI orchestration layer works with this complexity rather than requiring its elimination first. As governance rules change, they update the orchestration layer once rather than retraining thousands of users. As new data sources appear, they're accessible immediately through the same governed interface.

This is leapfrogging in action. The end goal of governed, accessible, integrated data can be achieved even while underlying complexity remains, allowing the foundation to be improved over time rather than fixed first.

EXAMPLE 2

Automated Data Intelligence Through Multi Agent AI Systems

THE TRADITIONAL APPROACH

Enterprise Data Management

For years, health and wellness organizations have relied on a combination of vendor contracts, analyst teams, and manual reconciliation to manage operational and regulatory data. Every month, it is a scramble to track updates from payers, regulatory bodies, and competitive markets only to end up with data that is costly to acquire and already outdated by the time it reaches decision makers.

Most organizations end up with a paradox where they invest heavily in data teams and external sources, yet still operate on delayed intelligence with inconsistent accuracy across regions.

Traditional Approaches Demanded:

- Manual monitoring of hundreds of payer, regulator, and market sources
- Region specific vendor relationships to license data that may already be stale
- Human analysts to extract and reformat data from PDFs, websites, and scanned documents
- Error prone spreadsheet reconciliation across pricing systems, risk engines, and compliance workflows
- Weeks of lag between a market change and its reflection in operational systems

THE MULTI AGENT AI SYSTEM

Data Intelligence Without Manual Orchestration

Instead of scaling analyst headcount or negotiating better vendor contracts, one organization deployed a multi agent AI system designed to own the entire data intelligence lifecycle from discovery to compliance ready output.

Discovery Agent continuously scans regulatory, payer, and market sources across all regions in real time without needing pre-defined URLs or data feeds.

Compliance Agent automatically checks extracted data against healthcare regulatory thresholds and payer contract constraints, generating a complete audit log for governance teams.

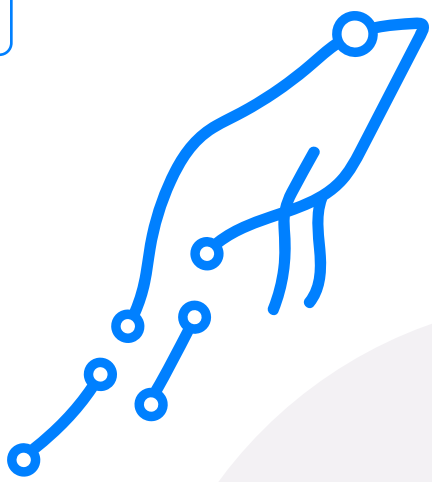
Extraction Agent parses unstructured formats like PDFs, tables, and scanned documents, automatically detecting pricing tiers, eligibility rules, or cross border conditions without manual tagging.

Export Agent delivers final intelligence directly in the formats required by pricing engines, reimbursement systems, and executive dashboards which eliminates the need for manual re-entry or transformation.

Validation Agent cross references new data against historical patterns and known market ranges, flagging anomalies like sudden pricing spikes for human review before errors propagate.

THE LEAPFROG EFFECT

- Real time data intelligence instead of monthly batch updates
- Elimination of vendor dependency for structured feeds
- Analysts become reviewers of edge cases, not data gatherers
- Compliance is enforced at the moment of extraction, not after the fact
- Scaling to new regions or payers becomes a configuration change, not a procurement cycle



Markets remain fragmented, file formats remain inconsistent, and regulations still evolve region by region. But instead of waiting for a unified data model or system consolidation project, the multi agent system works with the chaos, orchestrating intelligence across it.

This is leapfrogging in action: achieving real time, governed data intelligence now, without waiting years for foundational cleanup and standardization efforts that rarely materialize.

EXAMPLE 3

The Clinician Knowledge Gap Leapfrog

THE TRADITIONAL APPROACH

Peer to Peer Medical Consultations

For decades, hospitals have faced an impossible equation: a physician shortage, medical knowledge doubling, and clinicians spending more time searching for answers than treating patients.

Traditional Approaches All Failed:

- Hire contractors
- Train up staff
- Reengineer processes
- Informal "curbside consults"
- Journal searches

Most organizations accepted this as the cost of doing business with overwhelmed clinicians making decisions with incomplete information.

THE AI HUMAN HYBRID

Knowledge That Scales

A leading telehealth provider didn't try to replace human expertise or build a perfect AI doctor. Instead, they created an AI orchestration layer that amplifies human knowledge.

How the Leapfrog Works:

1. Clinician submits a question in natural language
2. AI instantly drafts a response with relevant journal citations
3. Verified specialists review and approve (10 minutes vs. 1+ hour traditionally)
4. System learns from every interaction, building specialty specific knowledge
5. Clinicians get evidence based answers in minutes, not hours

THE LEAPFROG EFFECT

Instead of solving prerequisites first, the organization achieved:

No need to hire more specialists:
AI amplifies existing expertise

No need for perfect AI:
Human oversight ensures accuracy

No need to standardize questions:
Natural language processing handles variations

No need to build massive databases first:
System learns and improves with use

The complexity remains as medical knowledge still doubles rapidly, specialists are still scarce, clinical decisions are still complex. But the AI human hybrid works with this complexity, turning 80% reduction in expert time into scalable knowledge access.

This isn't about AI replacing doctors.
It's about AI making expert knowledge accessible at the point of care, leapfrogging decades of failed attempts to solve the knowledge gap.

CASE STUDY

The Build/Buy/Live With It Revolution

The Operational Barrier: Provider Profiles

For years, provider profile management existed in a special category of problems: too expensive to build custom solutions for, no good products to buy, and too painful to ignore. Every health system "lived with it" through manual processes, frustrated providers, and inaccurate information that hurt both patient access and provider satisfaction.

PROFILEIQ

Enter ProfileIQ: When "Build" Suddenly Made Sense

The problem of provider profiles remained just as complex. What changed was the economics of building solutions. AI didn't just improve development; it fundamentally altered what's financially viable to solve.

How AI Enabled the Leapfrog:

Instead of building complex rules for every scenario, **ProfileIQ uses AI to:**

Understand Context
Pull information from PubMed, clinical trials, and institutional systems without manual mapping

Learn From Use
Improve accuracy based on provider corrections and preferences

Generate Content
Create professional biographies at different reading levels automatically

Integrate Intelligently
Connect with EHRs, Yext, and credentialing platforms without massive integration projects

The complexity of provider data didn't disappear.
ProfileIQ works with that complexity:

- Providers update through an intuitive interface (no training required)
- AI handles the messy work of reconciling different data sources
- Smart content generation eliminates the writing burden
- Analytics show impact without manual report building

The revolutionary insight:
Problems that have been accepted for decades might now be solvable in months. The question isn't whether to use AI, but which of your "live with it" problems to tackle first.

The Hardest Problem is the Biggest Opportunity

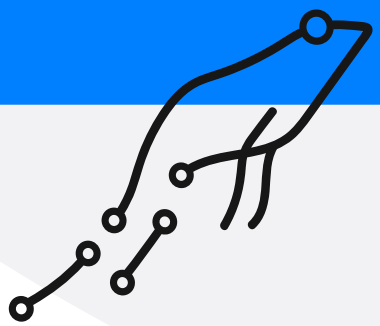
For decades, certain problems in health and wellness IT have been accepted as unprioritizable because they are too complex, too expensive, or too deeply embedded in legacy systems. Strategies have been built around these constraints, optimizing at the margins while core issues persist.

AI changes this fundamental equation by enabling entirely new ways of working with it. The examples in this paper are not edge cases, they represent a new normal.

- Integration happens without standardization
- Governance enables rather than restricts
- Knowledge scales without linear costs
- Solutions that once took years now take months

The Leapfrog Mindset

The organizations that will thrive aren't those with the cleanest data or the most modern systems. They're the ones that recognize AI as a fundamentally different tool, one that doesn't require perfection as a prerequisite for progress.



Next Steps

The problems your organization has labeled as "impossible" are not unsolvable, they are only unsolvable under a linear model of progress. AI introduces a non linear path that makes those problems solvable without fixing everything first.

Audit Your "Impossible" List:
What problems has your organization accepted as unsolvable (too expensive, impractical, or difficult)?

Calculate the New Economics:
How would solving these problems change if development took months instead of years?

Pick One to Prove the Model:
Choose your highest impact "impossible" problem and prove the leapfrog approach

Scale the Mindset:
Use early wins to transform how your organization thinks about AI and complexity

The future belongs to organizations that stop trying to eliminate complexity and start using AI to work with it. *Which of your impossible problems will you solve first?*

Ready to leapfrog?

Contact **Phase2** to identify and tackle your organization's hardest problem with AI.