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ARTIFICIAL INTELLIGENCE AGILITY

How to Build an Evolutionary Platform for AI

FIMA | AI

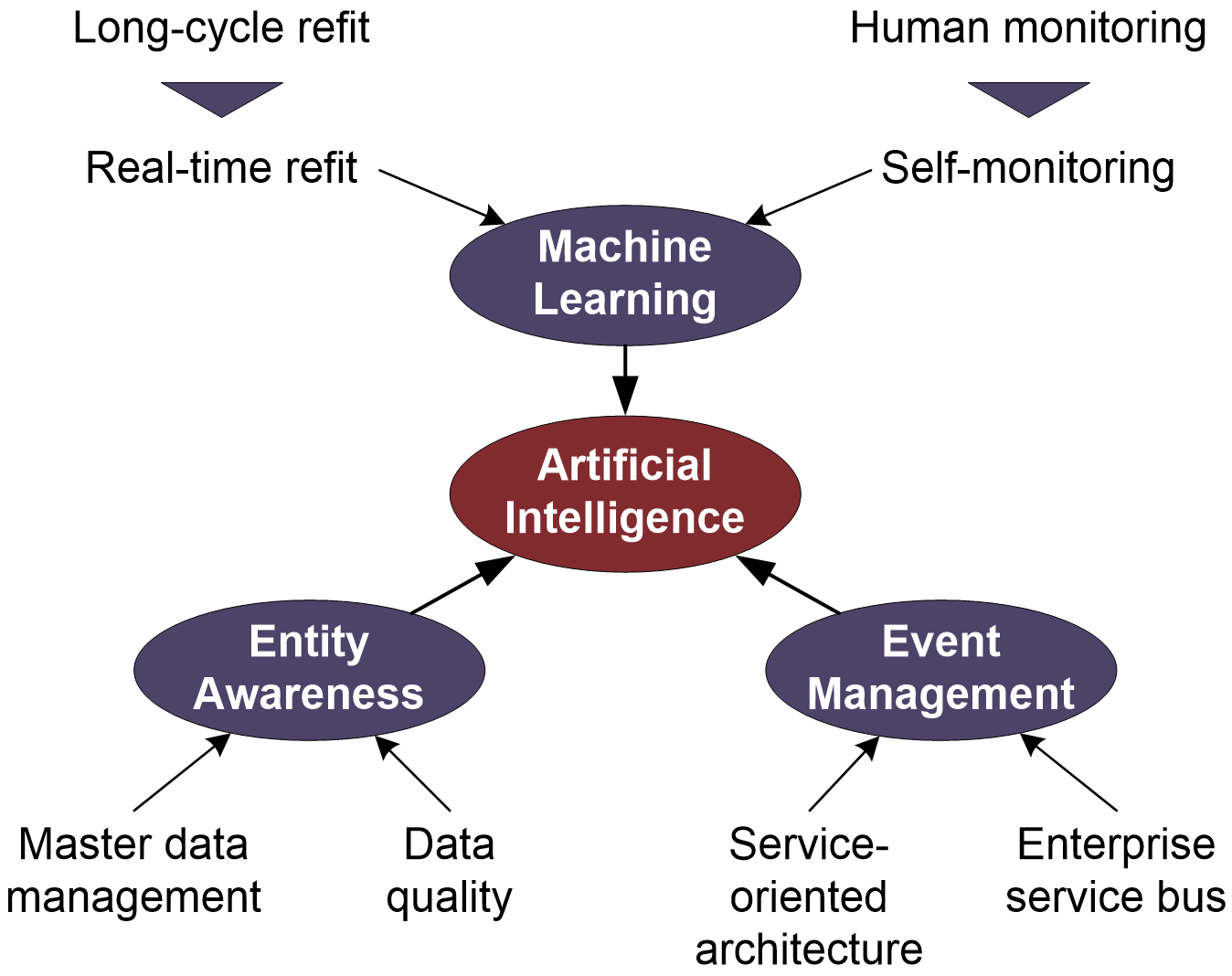
From Challenge to Success – Key business leader needed a level of analytics capability that resulted in the initiation of an analytics environment designed for perpetual evolution.

Before	After	Results
Fragmented practice	Centralized practice	New Personal Lines predictors
Slow onboarding	Rapid onboarding	Commercial Lines retention lift
Inconsistent environment	Unified environment	Call center operations improved
Insufficient compute power	Proper compute power	Quoting process shortened
Islands of technology	Connected technologies	Time to production halved
Tactical heroics	Defined strategy	Models run in 10% of the time
		Innovation tax credit
		Fairly low cost to operate
		450 users and growing

Live within 8 weeks. Now in production for 15 months.

Evolves on demand. Enables AI delivery.

Artificial Intelligence Defined – Artificial intelligence is the result of *machine learning* managing *events* on behalf of *entities*. This practical definition leads to an actionable plan for the next few years.



Shovels in the Gold Rush – Per the old metaphor, we could try to find the gold nuggets, or we can sell shovels—that is, build a platform to continually enable AI then let the data scientists find the gold.

Shift your thinking for the remainder of this discussion.

Yes, there is gold in AI in terms of growth, profitability, etc.

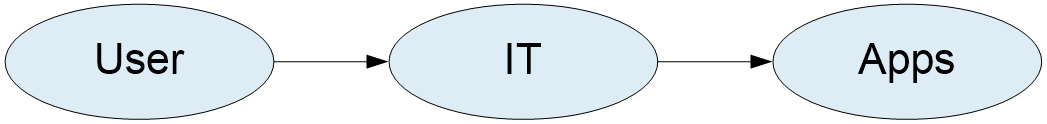
But what if instead you could build an engine that continually turns out AI insights?

"To get rich in a gold rush, sell shovels."

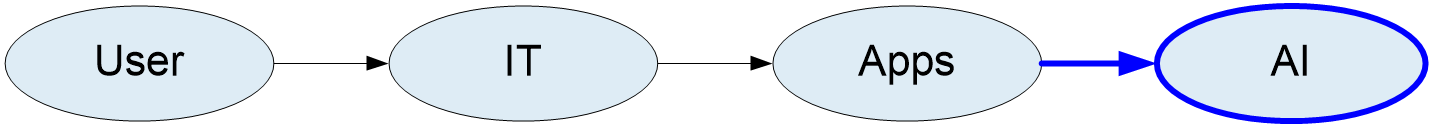
To get rich in the AI rush, build the right platform.

Data Science Self-Service – If AI is the thing being delivered, the question is who will deliver it? The role of the data scientist remains the key for the foreseeable future—aggressively empower this role.

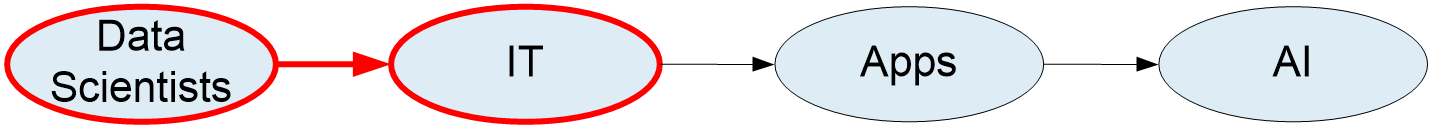
Traditional IT delivers applications.



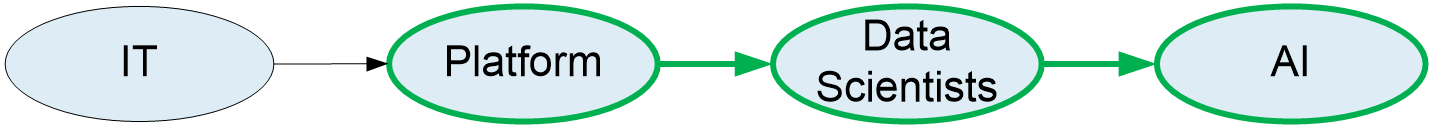
This model can deliver only certain types of AI.



But given the actual user, we often see a challenge.



Instead, reposition IT to empower data scientists to find AI insights.



Productivity in One Hour – AI work requires dozens of tools. Data scientists must be functional in these the instant they hit the platform so that fledgling ideas and emerging technologies can show value fast.

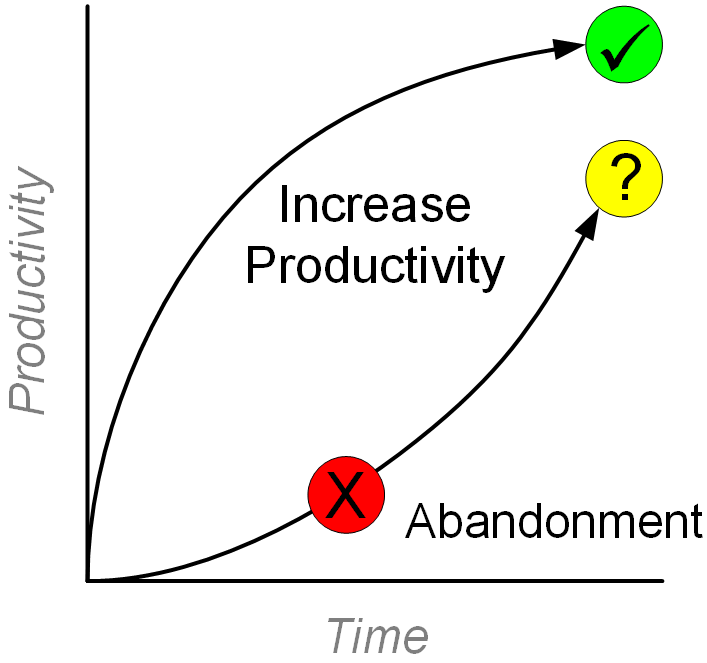
User gets any tool working in under an hour.

User gets any tool connected to any other tool in under an hour.

Must connect because most tasks need 5 to 7 tools.

Productivity lift, yes. Far more important—avoid the abandonment that kills innovation.

Democratizes data science, Allowing “non-geniuses” to join.



Results in smooth self-service productivity:

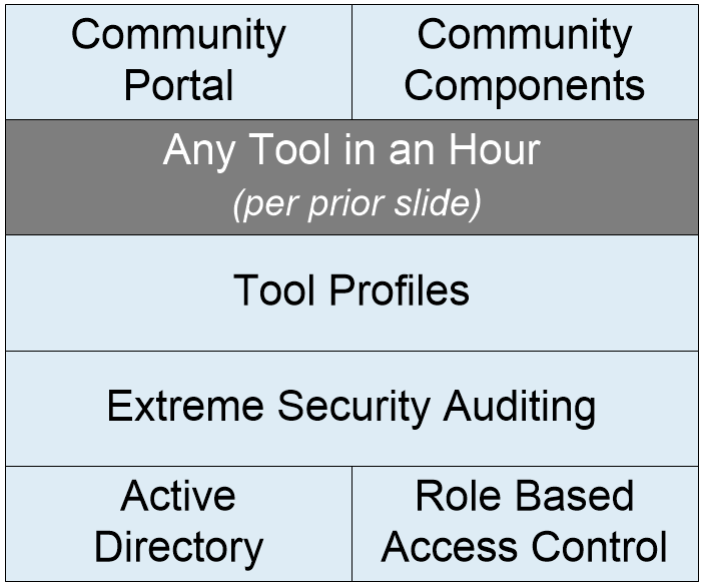
- Zero system configuration by the user
- “Wrappers” to make complex things simple
- Working code for the tool’s core function
- Working code to connect across platforms
- Documentation aligned to user job flow

High-Speed Onboarding – Data science teams are constantly adding staff, changing teams, and being augmented from the outside. Such dynamic teams are directly enabled by platform and community design.

Make a "mandatory" portal that is their only path to all this value.

Take over all layers of system configuration (profiles) and align to user's purpose.

Design team and vendor coordination structure into the corporate security system.



Unify the needed software configuration and get it pre-approved for rapid assignment to specialized vendors.

Allows teams to be onboarded and coordinated quickly.

Produces the "walled garden" design pattern--can both share or isolate as needed.

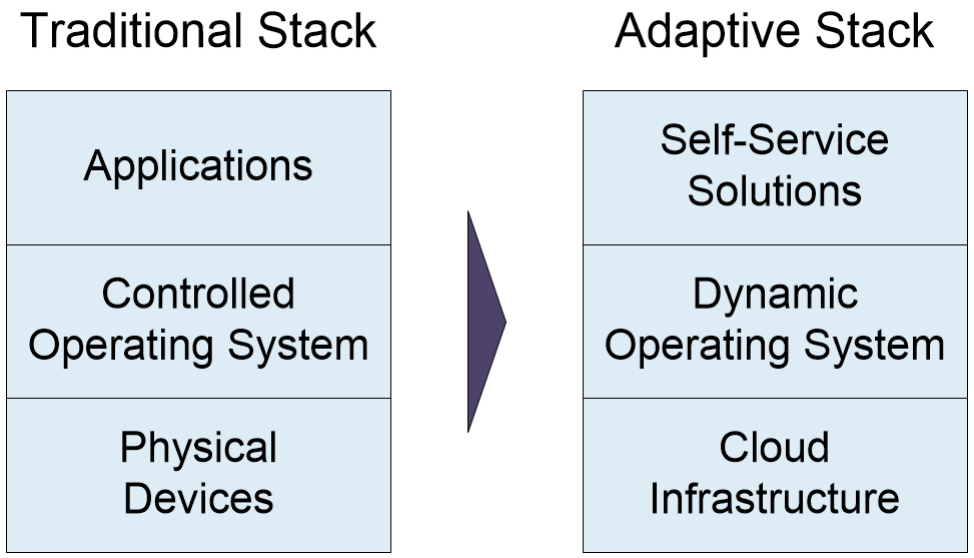
With teams on a unified platform, sharing is the norm rather than the exception.

Adaptive Software Stack – Cutting-edge algorithms are constantly emerging. Move power traditionally reserved for the lower IT stack up to the IT team that is in direct support of the data scientists.

Create a specialized IT team that focuses on data science support.

Use Linux as a productivity environment, not just an operating system.

Give the team hundreds of admin commands traditionally reserved for back-end IT.



Support experimentation with throw-away cloud servers.

Heavily favor open source since it contains most of the cutting edge thinking.

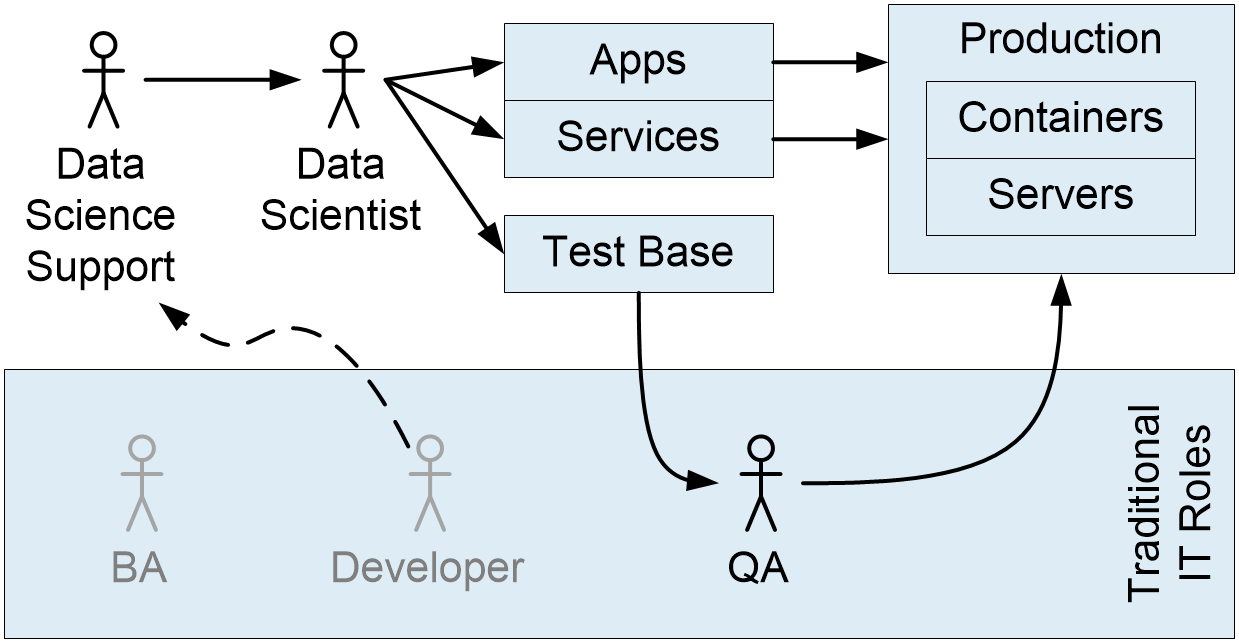
Think in terms of delivering tools for self-service solutions, not applications.

AI DevOps Process – Deploy models directly from data science to production with an optimized delivery process. Bring closed-loop, entity-aware, event-handling machine learning ever closer to real-time.

Coding has been getting safer and more robust for decades.

Let data scientists write the core logic.

Move developers to support data scientist to make the code robust.



Make production part of the unified environment for direct deployment.

Recapture time and cost by largely eliminating BA.

Still use QA-- must have usual checks!

Separate concerns with containers and service-oriented architecture.

Q&A

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