

Modernization – A Technical Perspective

Gary Wheeler / Steve Murchie AIRA National Meeting April 2022





Welcome!

Modernization, again?
Some guiding principles
Technical perspective, where to focus?
Many paths to a goal
3 Examples from Envision experience
Community perspective
How does the community win?



Modernization again? It's a journey not a destination...



"Without continual growth and progress, such words as improvement, achievement, and success have no meaning."

Benjamin Franklin

What do you think of when you hear "modernization"?

Where do I begin?

- ☐ Define the 'value' in your modernization efforts
 - What problems do we expect to solve?
 - How will our efforts increase value for our organization?
- ☐ Strive for simplification, w/ design for flexibility and speed
- ☐ Business requirements drive technology modernization
 - Not all technologies will work for you, it is okay
 - One size doesn't fit all no easy button
 - Think sustainability





Technical Perspective: where to focus?

Low TCO

Cloud everything

Open source

Specific technologies (NoSQL, R, Python, Hadoop, Blazor, Java, Angular, COBOL, ... Plug-and-Play Services

Security

"Abilities"

Access to Data

Fast delivery of changes

Less Important

Goals

More Important



Many Paths to A Goal

- ☐ Incremental vs. "Big Bang"
- ☐ Measure outcomes vs. outputs
- ☐ Manage change that impacts users
- ☐ Pick paths of least resistance





Example: Cloud Migration

laaS PaaS SaaS

- Lift and Shift (ish)
- Utilize more platform services, but still looks like on-prem
- Can incorporate services that would be too expensive on-premises

- Committed to platform services
- All or none conundrum

- Application opaque, but open via APIs
- Point of no return



Example: Adoption of Smarty [Streets]

- ☐ Low barriers to implement
 - Simple to consume APIs
 - Well-documented responses
 - Costs mitigated
 - Minimal legal hurdles

- Outcomes
 - 2+ years to full embed
 - Correcting and geo-coding all data at rest
 - Much improved data quality
 - Patient matching improved



Example: Accessibility

- ☐ New vs. old code
- Inconsistent measurement
 - WCAG 2.0 A \rightarrow AAA
 - Screen reader scores differ

- Outcomes
 - Public Portal achieved AAA compliance
 - 3 pages required 3+ months of effort
 - Goal for remainer of site is A to AA
 - Working through ~100 relatively new pages / 500+ addl. pages to consider

Community Modernization Perspective





How does the community win as we go forward?

- ☐ Modernization Working Group
 - Where else can we benefit from shared services?
 - How do we fund and support?
- Drive to Certification
 - Not just validation (build on it)

