MaineHealth Information Services

The Epic Impact to a Reporting and Analytics Infrastructure

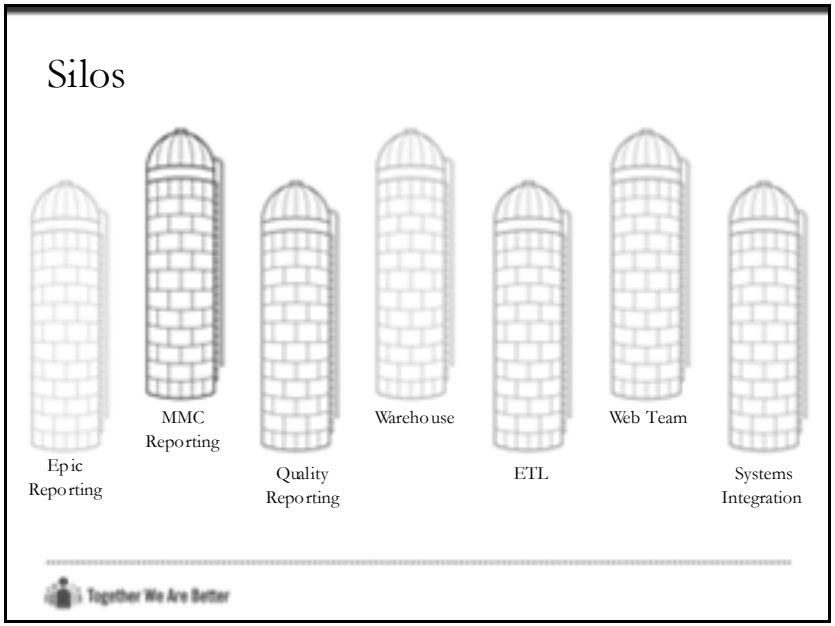
How MaineHealth Reporting Continues to Adapt to Supporting an Epic Infrastructure

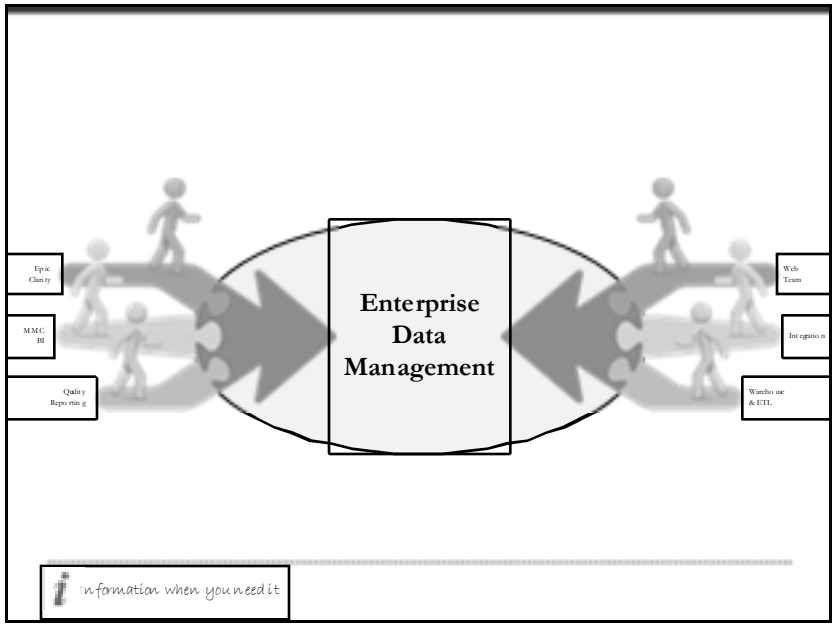
2018.11.15

TOGETHER We Are Better

The Origin Story…

- Resource rich
- Information poor
- Lack…
  - Connectedness
  - Collaboration
  - Coordination
  - Leadership
  - Standards
  - Vision
- Poor customer satisfaction!


Silos
Epic Reporting
MMC Reporting
Quality Reporting
Warehouse
ETL
Web Team
Systems Integration
Together We Are Better

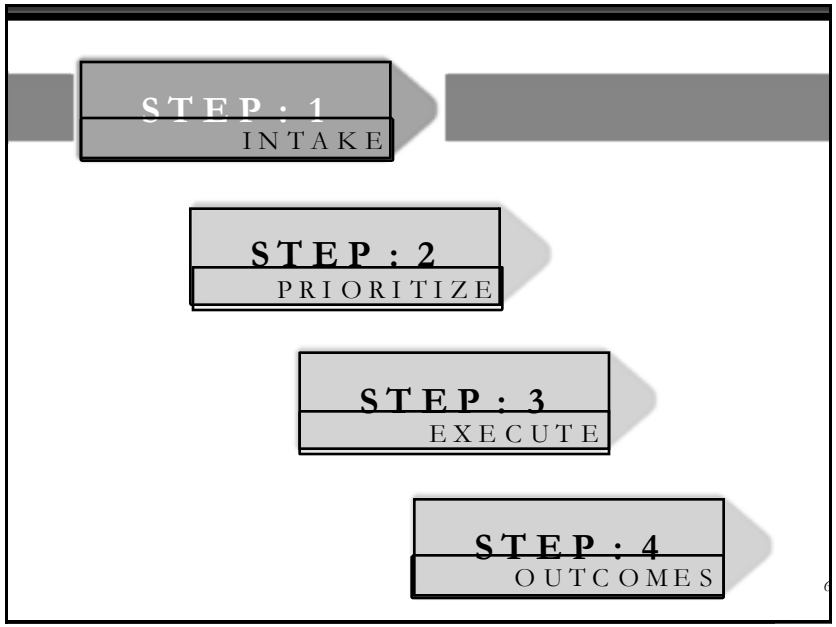

Epic Clarity
MMC BI
Quality Reporting
Enterprise Data Management
Web Team
Integration
Warehouse & ETL
Information when you need it

Enterprise Data Management is…

- All Functional Teams:

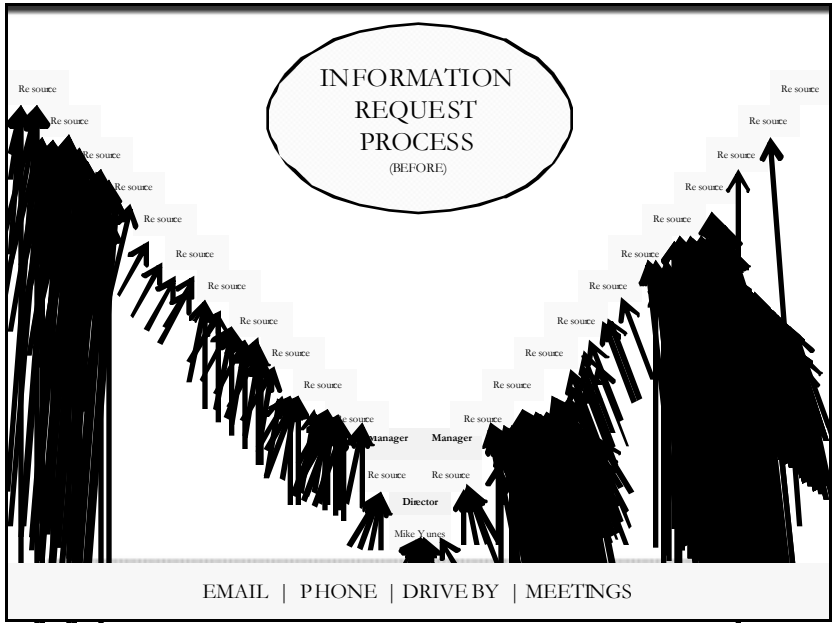
Together We Are Better

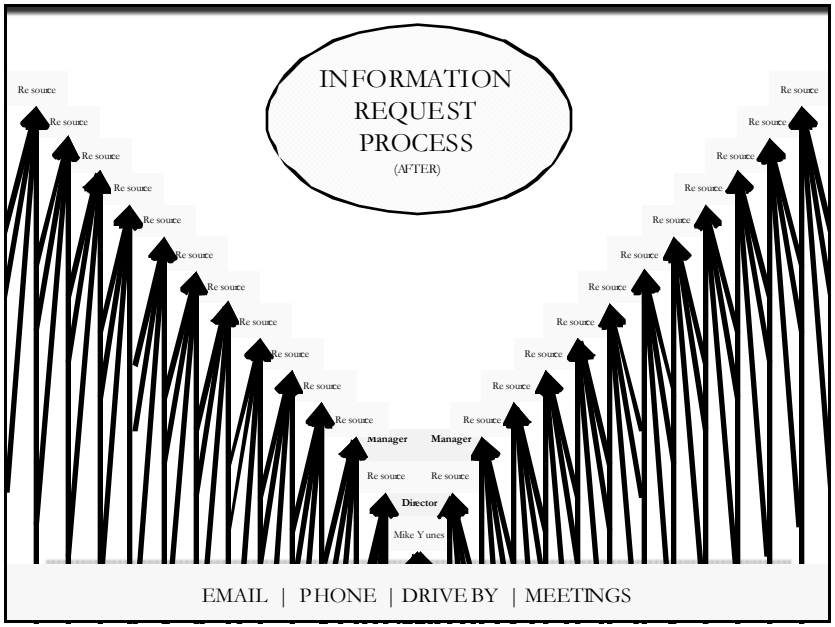
5

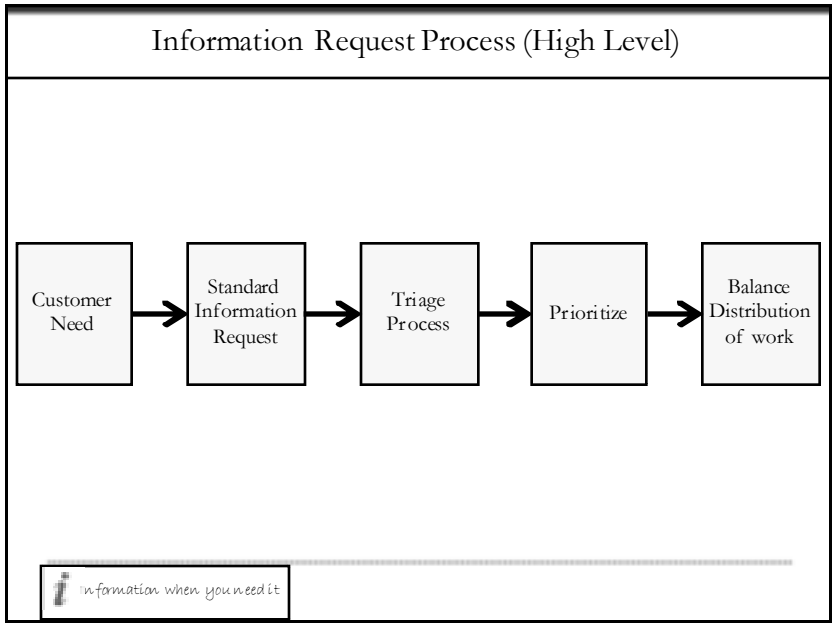


Intake?

- Intake
  - Process for a request for service or request for information (Net-new or failure)
- Why
  - It's about the **customer** not the team




INFORMATION
REQUEST
PROCESS
(AFTER)
Resource
Manager
Manager
Director
Mike Yunes
EMAIL | PHONE | DRIVE BY | MEETINGS


Information Request Process (High Level)
Customer Need
Standard Information Request
Triage Process
Prioritize
Balance Distribution of work
information when you need it

Information Request Process

STEP 1
Click on life saver on your desktop

STEP 2
Fill out form
"Enterprise Reporting Report Request"

STEP 3
Submit the request

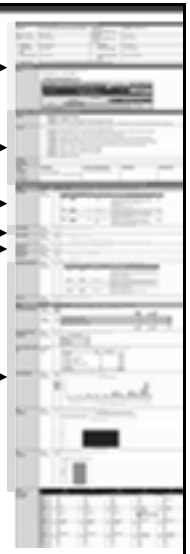
Triage

- GOALS:
  - One request process for customers
  - Right team at the right time
  - Bring "shadow IT" teams out of the shadows
  - Create a safety net for several key customer focused metrics
    - » Watch list
    - » Unassigned requests
    - » Appropriate and Timely Communication
    - » User Acceptance always received and documented
  - Daily team-lead meeting (Team Building)
  - Visibility and transparency
  - Mechanism for capturing metadata to facilitate reporting on reporting.

information when you need it

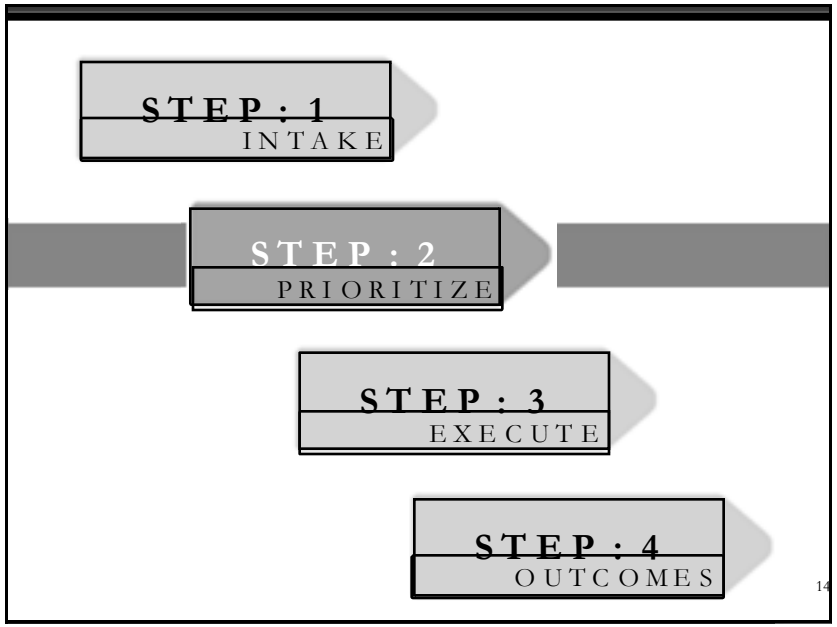
Reporting Triage

- Daily (M-F)
- Lead by IT but participants across system (EDM Reporting, MMP BI, MMP Quality, SMHC Quality, RCM, MMC Finance, MMP Access Center)
- Review all reporting requests received between 9am→9am the previous business day
- Agenda:
  - Operational items
  - Key Events
  - Watchlist items
  - Unassigned
  - New Requests
  - Metrics/KPIs



Together We Are Better

13



14

Shared Ownership

- We are in this together
  - Partnership
  - Shared resources
  - Commitment

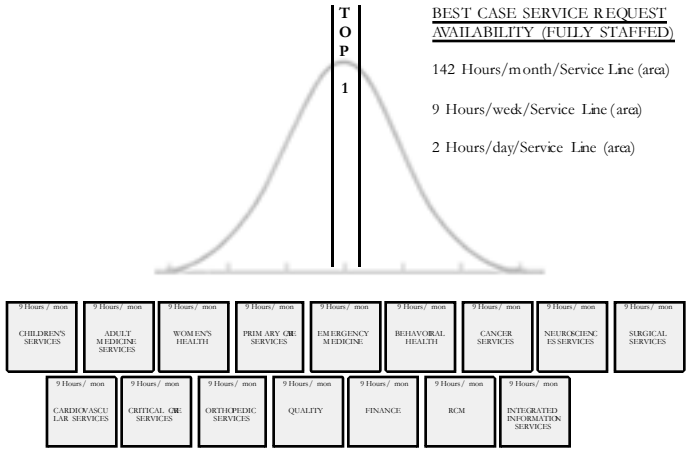
Meta-Data (Reporting on Reporting)

- Created a significant number of fields within our ticketing systems
- Key fields include
  - 'Major Service Area'
  - 'Service Line'
  - Rank
  - User Acceptance (User and Date)

HIA – Healthcare Informatics Analyst

Business Analyst role within Enterprise Reporting with function to partner, understand, & facilitate business data needs

- Daily Activities
  - Customer Call Back & Triage
  - User Acceptance Testing Coordination
  - Research, Analysis, & Design
  - Content Enablement
  - Training & Support
  - Team Navigation & Facilitation
- Weekly Activities
  - Operational Executive Review & Prioritization
- Monthly Activities
  - Operational Governance
  - Onsite w Operational Offices



Together We Are Better

Prioritization

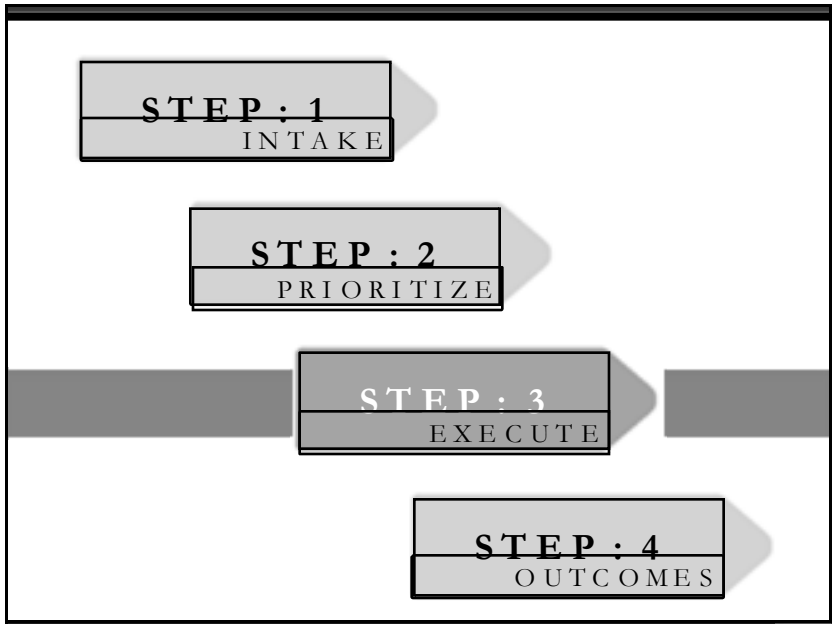
- Business Analysts (HIA) meets with service line leader to review requests (existing/new) and rank them.
- Ensures we have resources working to solve the most important requests for each service line where process is in place.

Partnership (The Early Adopters)

- Willing service line leaders to test the new prioritization process and the 'HIA Playbook'
  - Started with
    - » Adult Medicine
    - » Women's Health
    - » Pediatric Health
  - Have rolled-out support to all areas where there is a leadership structure to support it.

Priority Management Automatization

- Application developed to
  - 1) Generate queue of tickets/requests by service line
  - 2) Allow HIA to dynamically adjust priority by dragging the ticket into the desired position in the queue
  - 3) Allow HIA to place an update on the ticket on the fly without having to go into ticketing system
    - » All changes are committed to the production ticketing system

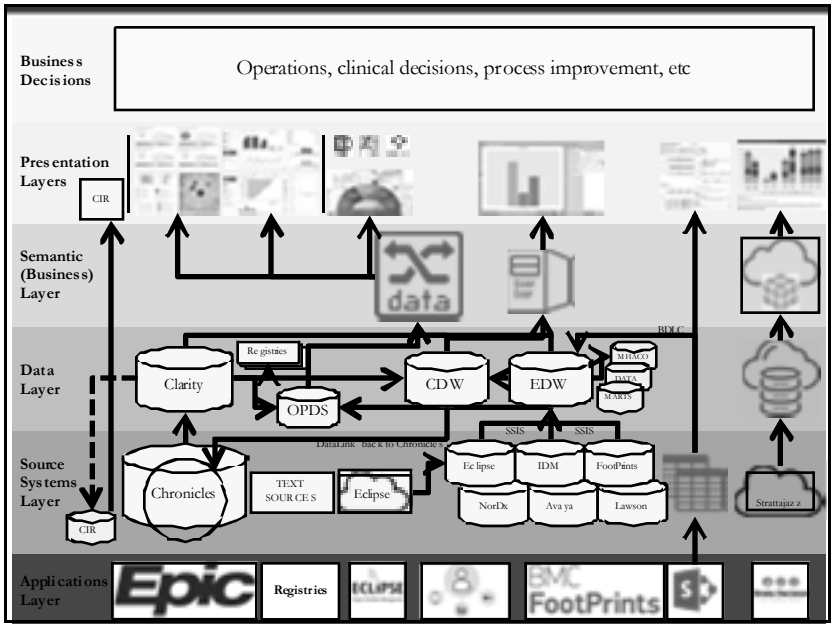


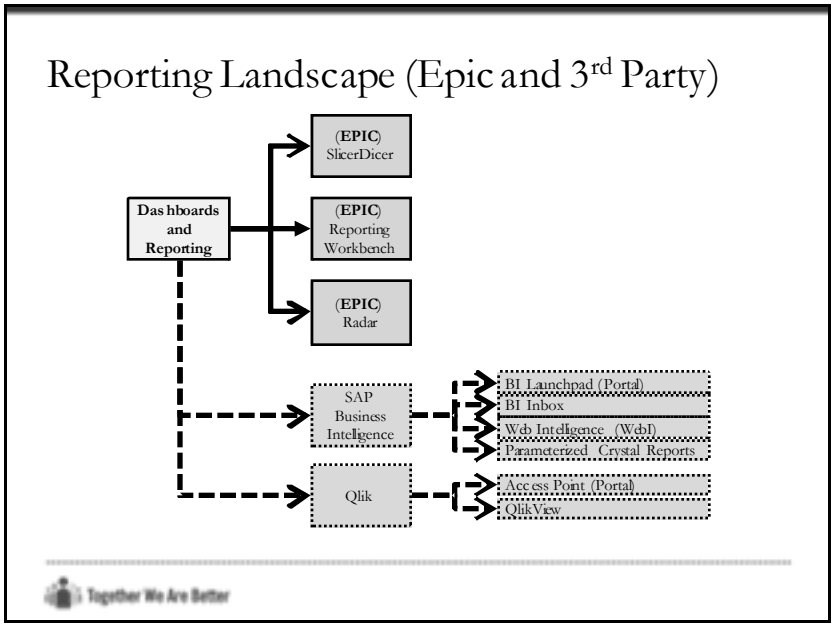
Architecture: Started with

- Complicated
- Disjointed
- Multiple versions of the same thing
  - 3 separate Business Objects contracts and environments
  - 1 separate SAS Business Intelligence Environment (SAS EG)
  - Dozens of desktop only SAS EG
  - Several online 'portals' including several homegrown and team managed
  - 2 defunct 'warehouse' environments (neither of them Epic related)
  - A several year process that failed to get consensus on a Business Intelligence tool to standardize on
  - 2 Midas instances used for core measures reporting, quality reporting and risk management (multiple applications used throughout system that aren't Midas).

Architecture: Current State

- Complicated (…this will never change ☺)
- Purposeful
- Rationalized (to a degree)
  - 1 Business Objects Enterprise Environment
  - 1 Epic data warehouse (PHI/PII) = Caboodle
  - 1 Enterprise Data Warehouse (non PHI/PII)
  - 1 enterprise visualization platform (QlikView)
- SAS BI infrastructure to be retired (by **12/15/2018**)
  - Small, single server (VM), purpose built for research analysis (and not reporting) in place
  - 1 new Midas instance being created to replace 2 Midas instances and onboarding Southern Maine.(and retiring their non Midas application)
    - » Care management is now standardized within Epic


Business Decisions
Operations, clinical decisions, process improvement, etc
Presentation Layers
CIR
Semantic (Business) Layer
data
Data Layer
Registries
Clarity
OPDS
CDW
EDW
BDLC
MDACO
DATA
MARTS
SSIS
SSIS
Source Systems Layer
Chronicles
TEXT SOURCES
Eclipse
Eclipse
IDM
FootPrints
NorDx
Avaya
Lawson
Strattajazz
CIR
Applications Layer
Epic
Registries
ECLIPSE
BMC FootPrints


Reporting Landscape (Epic and 3rd Party)
Dashboards and Reporting
(EPIC) SlicerDicer
(EPIC) Reporting Workbench
(EPIC) Radar
SAP Business Intelligence
BI Launchpad (Portal)
BI Inbox
Web Intelligence (WebI)
Parameterized Crystal Reports
Qlik
Access Point (Portal)
QlikView
Together We Are Better

Epic Cogito Analytics

- SlicerDicer
  - Epic Hyperspace | 1-Day behind
- Radar
  - Epic Hyperspace | Real time or analytic
- RWB
  - Epic Hyperspace | Real time
- Clarity
  - Epic Hyperspace or Analytic tool | 1-Day behind.
- Caboodle
  - Epic Hyperspace or Analytic tool | 1-Day behind.

3rd Party Analytic Tools

- SAP Crystal
  - Highly curated experience.
  - Typically single purpose.
  - Designed for print.
  - Typically delivered on schedule or on demand with parameters.
- SAP Web Intelligence (WebI)
  - Highly curated experience.
  - Typically single purpose.
  - Viewed within web application with user input controls
  - Typically run by user only on demand
- QlikView
  - Highly curated experience.
  - Typically Designed for multi-purpose.
  - Refined dashboard look and feel.
  - Not typically designed for print.
  - Applications built on a schedule.
  - Users access applications as needed.

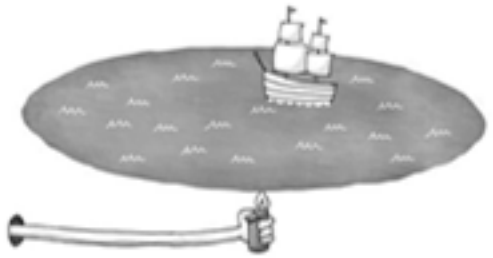
STEP : 1
INTAKE

STEP : 2
PRIORITIZE

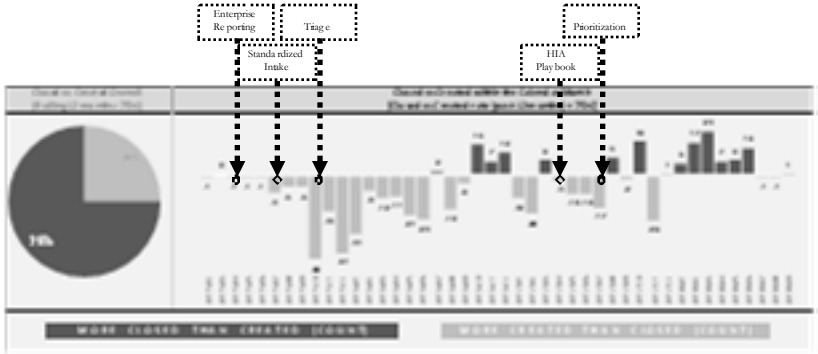
STEP : 3
EXECUTE

STEP : 4
OUTCOMES

Customer Satisfaction

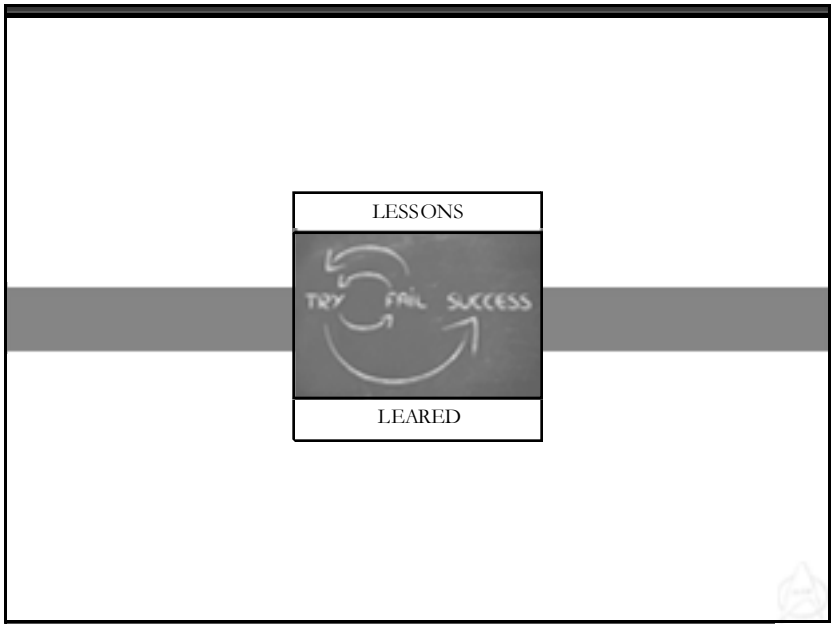


Operating Model Impact to Outcomes



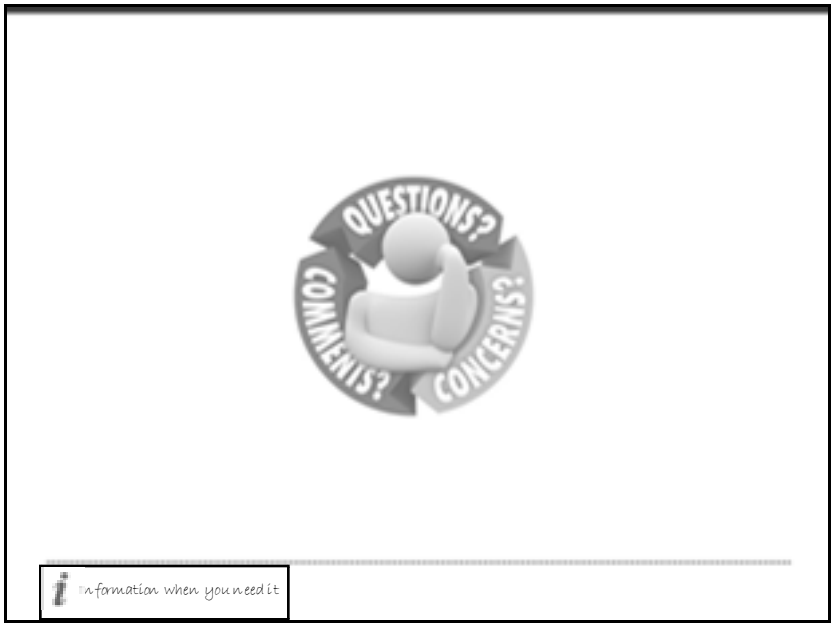
Reporting Catalogue

- Before
  - Each hospital system would be asked to create a list of reports they want once they are on Epic
  - Results in several hundred report and extract requests
  - Could take up to a year after go-live to complete requests.
- After (Now)
  - By tracking meta-data we are able to create and maintain a Report Inventory
  - Report inventory in the current state are reports flagged as standard reports
  - Use SQL to query the meta-data and publish the inventory to SharePoint.
- In Progress (Next year)
  - Fully functional Epic and 3rd party reporting inventory!



Lessons Learned

- Stay (or become) customer focus (not IT focus)
  - Transparency
  - Shared ownership
  - Greater satisfaction
- Operating model needs to adapt
  - Resources (people, hardware and technology) I had were not exactly what I needed
- Architecture needs to adapt
  - Move to an Epic first mentality/infrastructure
- IT culture has been (and continues to be) the biggest obstacle
  - That's not what we do...


QUESTIONS?
COMMENTS?
CONCERNS?
information when you need it