2023 HEALTHTRUST UNIVERSITY CONFERENCE PLAME **ALIGNED FOR SUCCESS OPTIMIZING OUTCOMES**

Repairing Fragmented Reporting & Teams: *Success Strategies to Build On* Brandon Johnson

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Meet the Presenters



Moderator



Brandon Johnson BI Manager 1 St. Luke's Health System

Panelists



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• The presenters have no real or perceived conflicts of interest related to this presentation

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Learning Objectives

At the end of this session, participants should be able to:

- 1. Recall the importance of transforming a reporting platform to one that includes centralized reporting.
- 2. Describe the logistics and components of managing a reporting platform transformation.
- 3. Identify the benefits received from a reporting platform transformation with centralized reporting.





Not So Distant Future...

- Big data has gained huge popularity due to advancements in hardware & software technologies
- Chief information officers are going to face a big challenge in meeting digitization aims
- This challenge would be the talent gap that is expected to emerge in the coming years
- 63% of executives say it is essential to hire talent who possess the required expertise; It is essential to cope with the existing talent gap

Source: An Empirical Study on the Effects of Top Management Leadership for Big Data Success

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Centralized Model



- In a centralized model, data resources for the data team such as Data Analysts, Data Warehouse, ETL Engineers & BI developers are managed by one core-specific group.
- If someone from outside the data team has a data-related request, they submit it to the data team for prioritization.

Source: Vaughan, E., & Lantz, J. (2022).

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Embedded Model



- An embedded model normally has a central group of data engineers who own the data warehouse with Data Analysts & BI Engineers being decentralized, or embedded, within a specific business area such as finance or supply chain.
- This model has specific business areas manage & owns their work in each individual area.

Source: Vaughan, E., & Lantz, J. (2022).







Is your Data Team currently:

- A. Centralized
- B. Embedded





The Case for Centralized Analytics

• Vertical structure of organizations can be hindered by slow communication & decision-making processes

- Lateral capability is important in designing adaptive organizations
 - Allows for coordination across units through organizational design & communication structures

Source: Designing Organizations: An Executive Guide to Strategy, Structure, and Process



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Why data & analytics as a Centralized Model?

Our growth & commitment to our patients, staff & the broader community rely upon our ability to continually embrace change.

<u>Value</u> is the product of the quality of care plus the patient experience at a given cost.

In order to solve for the value equation, we need the data & analytic capabilities for achieving a value-focused healthcare delivery system.



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How do we get there?

We must bring together the right capabilities, the right skills & expertise



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What's in it for us?

Efficiency – Current skill set varies greatly. We have business knowledge workers trying to analyze data without proper skills

Right Technology – Majority of work is done in Excel; not an analysis or data tool

Scalability & Speed – For any given project/initiative, we look to add FTEs or take away from other projects

Building the right capability in data, BI, analytics will give us the scalability & speed-to-market functionality to solve the problems we have





Digital & Analytics Transformation

Old way

Limited technology, spreadsheet driven, disparate data Single SME, waterfall heavy, fragile operations Siloed teams, analytics largely part-time job, limited career path

New way

Power BI, advanced analytics capabilities, modern data platform

Agile scrum, Kanban, Operations processes, Service Level Agreements

Cross-functional teams, specialized data skills & career path

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Data & Analytics Operating Model



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Analytics Journey

Self-service & automated analytics Human thought simulation, autonomous actions

Foresight – What will happen? (30/60/90 re-admission likelihood for patient, contributing factors)

Insight – What happened? Why? (# ED visits, admission DRGs)

Hindsight – What happened? (# patients seen) Machine learning Data lakes Visualization frameworks

Enterprise data warehouse BI tools Complex event processing

Excel files Direct data connections Early renditions of warehouse

Infrastructure

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Analytics

maturity







Customer Engagement Model

Carrie Powers



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Customer Engagement Model

Goal

Connect areas of the organization to services & solutions provided by Data & Analytics

We believe...

Strong relationships, fueled by collaboration, communication & transparency, are integral to the delivery of solutions that enable value creation within the clinical & operational lines of the business





Key Objectives of Customer Engagement Model

- Align on strategy, tactical execution & emerging technology
- Establish a forum & cadence for support & request intake
- Continually prioritize current & planned work
- Promote service performance & solution delivery transparency







Support Model







Tactical

Bi-Weekly Planning & Prioritization

- Objective:
 - $\circ~$ Demonstrate work recently accomplished
 - Prioritize & plan next 2–6 weeks
- Attendees:
 - Lead Analyst & BI Manager
 - $\circ~$ Area Point of Contact
 - Area Leaders / Subject Matter Experts

- Frequency recommendation:
 - $\circ~$ 1x every two weeks

Strategic

Business Review

- Objective:
 - $\circ~$ Demonstrate work from prior period
 - Prioritize & plan next 6–18 months
 - Share & align Area & D&A strategy & priorities
- Attendees:
 - Lead Analyst & BI Manager
 - Area Point of Contact
 - Area Senior Leaders & Stakeholders
 - Data & Analytics Leaders
- Frequency recommendation:
 - o 2x every year

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Development Life Cycle



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Centralized Reporting & Technical Benefits

James Monson

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Portfolio Summary

- Centralized reporting experience
 - \circ 5 apps
 - ~63 reports
 - \circ ~ 10 dashboards







Some Technical Benefits



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Transform Reporting Platform + Centralize | Why, What, Benefits Crystal Geibel

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Recall the Importance of Transforming a Reporting Platform to One That Includes Centralized Reporting

- Fragmented reports in Excel & Access with unsupported in-house platforms & third-party solutions do not meet the reliability & functionality of the new environment.
- Poor user experience. Different sources of truth. Unharmonized data.
- Increased pressure from C-suite for visibility.
- Continued demands for savings generation.
- Discontinued support. Tribal knowledge lost. Unstandardized development. Lack of talent.



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Describe the Logistics & Components of Managing a Reporting Platform Transformation

- People
 - \circ Partnership model
 - Hiring the right expertise
- Process
 - Agile team set-up
- Technology
 - $\circ~$ Tracking work in DevOps
 - \circ Data warehousing
 - $\circ~$ Migrating to a standardized front end
 - o Data governance



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Identify the Benefits Received From a Reporting Platform Transformation With Centralized Reporting

- Company Benefits
 - $\circ~$ Single source for data
 - $\circ~$ One team of support
- Knowledge Sharing Benefits
 - $\circ~$ Specialization can thrive
 - Knowledge retention
 - \circ Center of excellence
 - Cross-functional benefits
- Data Source Benefits
 - Agreed upon data sources & definitions
 - $\,\circ\,\,$ Data modelling needs are beyond Excel & Access



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Citations

- Interdisciplinary perspectives on small groups. Small Group Research, 35, 3-16. Vaughan, E., & Lantz, J. (2022).
- Park, Sohyun, Goo, Bonjae, & Lee, Kunkhie., "An Empirical Study on the Effects of Top Management Leadership for Big Data Success," Information System Review. Vol. 18, No.2, June 2016.







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Thank you...

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