SELF-SERVICE A USER-CENTRIC TOOL ROLLOUT

Advancing Analytics in Children's Hospitals

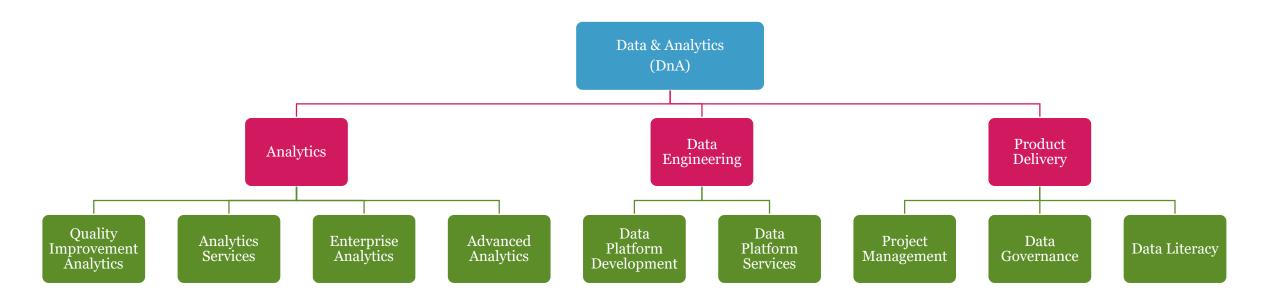
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BACKGROUND

The 80 person Enterprise Data & Analytics team at the Children's Hospital of Philadelphia (CHOP) functions in a Center of Excellence model, containing all functions to develop end-to-end analytics solutions for clinical, financial, & operational analytics.





SITUATION

- The Data & Analytics team at CHOP has struggled to keep up with all the financial, clinical, and operational requests for data submitted by clinicians, administrators, and business operators throughout the enterprise.
- Many dashboards and reports have been developed yet the team is still inundated with new and enhancement requests
- Until this year, these requests could only be fulfilled by members of the Data & Analytics team resulting in long queues and long wait times





TARGET

Self-service analytics would empower users throughout the hospital to answer their own multistep inquiries.

Enabling the users to...

- Create content that can be shared with their department
- Reduce the time to delivery and insight
- Limit the exporting of data to Excel

Benefiting the Data & Analytics team by...

- Reducing the number of simple one-off requests
- Allowing data analysts to focus on complex, high-impact requests



How many patients with Asthma did I see last year in the ED? What portion of these patients live in Philadelphia? Are there specific neighborhoods with spikes?



How long do new patients have to wait before being seen in a specialty care clinic? How much does this vary by site? Can we shift patients to different locations to minimize wait times?



APPROACH

Build a cross-functional team

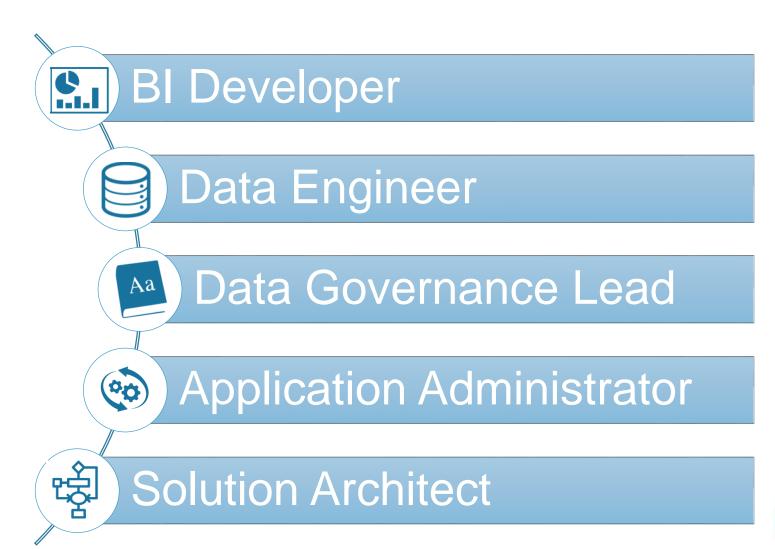
Define self-service at CHOP

Set principles of tool implementation

Construct a user-centered experience

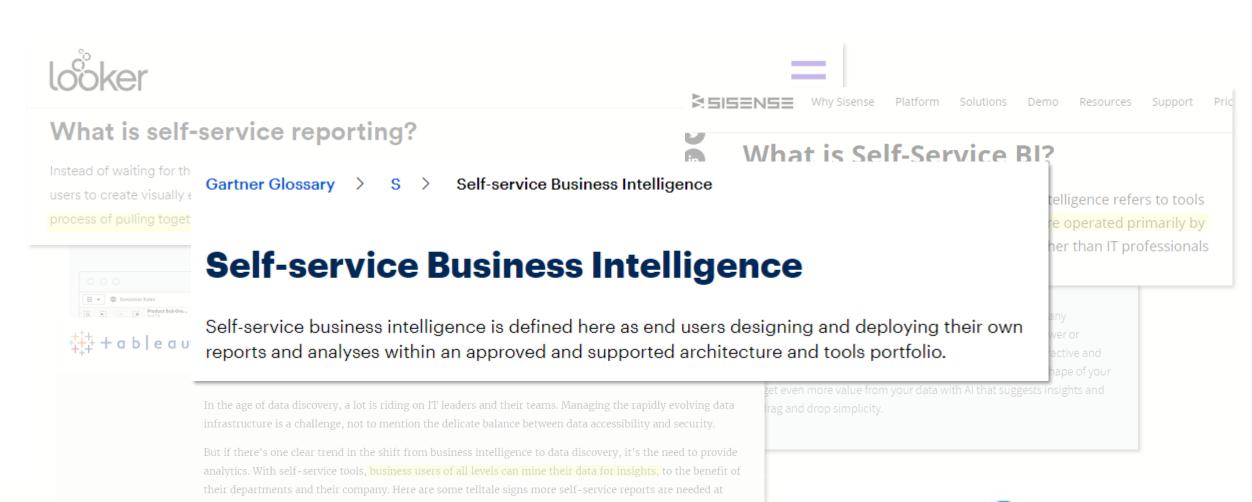


THE TEAM





SELF-SERVICE DEFINITION

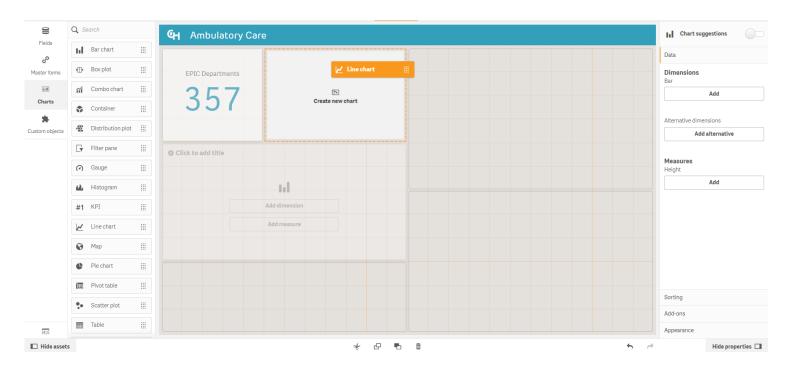




PRINCIPLES OF IMPLEMENTATION

Easy-to-learn tool, process, and workflow

• The user experience needs to enable a low barrier to entry for users of all levels





PRINCIPLES OF IMPLEMENTATION

Separation of local and enterprise analytics

- Local analytics allows teams to rapidly explore datasets and iterate on reporting methods
- Enterprise analytics are governed products that use shared data elements, metrics, or definitions.



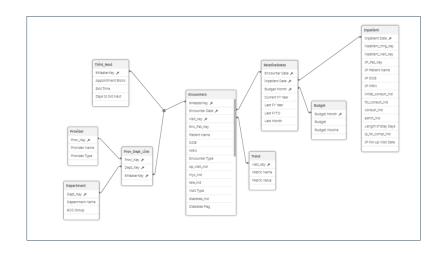




PRINCIPLES OF IMPLEMENTATION

Data-first development

- Business logic and data definitions should be stored within the database
- CHOP Blocks the curated data marts built on top of our data warehouse contain simplified, governed, and widely used data elements









USER ROLES: BEFORE SELF-SERVICE

Previously, data users primarily fit into one of two roles:



App Consumer

- End user of data products, gaining insights from dashboards and reports built for them
- Able to apply filters, set parameters, or export data for further investigation
- Submits requests for additional data elements or changes to existing products



App Developer

- Primary creator of analytics products, including interactive apps and data export requests
- Bridge (and lynchpin) between consumers and the data warehouse
- Often a data analyst, with coding experience



USER ROLES: REDEFINED

Self-Service analytics users will be one of three roles:



App Consumer

Someone who interacts with pre-built charts and tables in published apps



App Contributor

Someone who creates new visuals within existing apps and data models



App Developer

Someone who builds apps from scratch, beginning with the data connections

Example of Results

- A Manager for Access Services is now a **Developer** has published 3 apps
- A Practice Manager is now a **Contributor** and has created 5 custom visuals



NEXT STEPS

- A user community is essential for supporting our newly minted Contributors and Developers
 - 132 Contributors and 99 Developers covering 55 content areas
- Expand clinical user pool
- Create training programs
 - Data literacy
 - Data platform
 - Reporting tools
- Continue building CHOP Blocks



Questions?

Thank you!

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