SUPPORTING DATA-DRIVEN
BASKETBALL JOURNALISM
THROUGH
INTERACTIVE VISUALIZATION

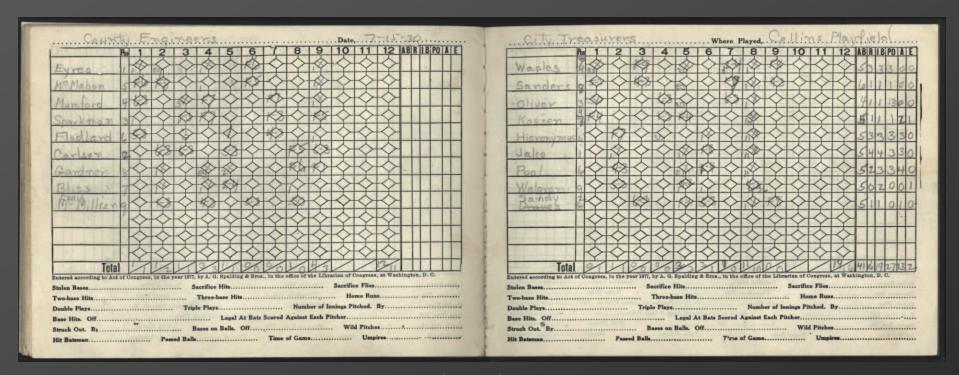






SPORTS JOURNALISM

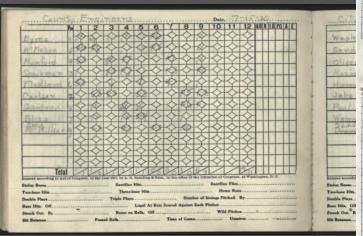




Baseball Scoring Book (1930) via Wikimedia Commons

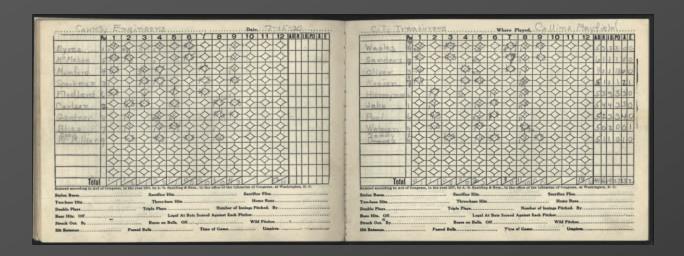


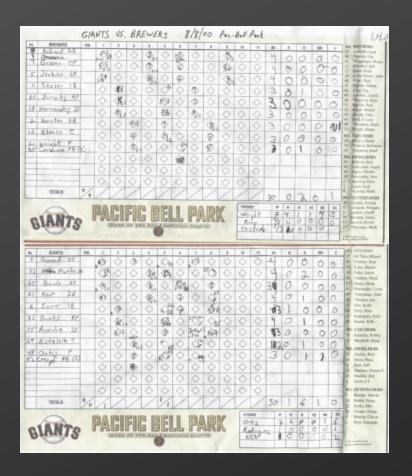
SPORTS



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Pac Bell Scorecard (2000) via Wikimedia Commons





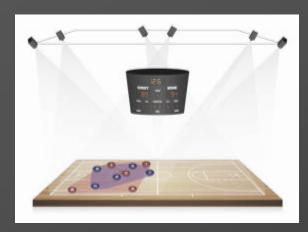






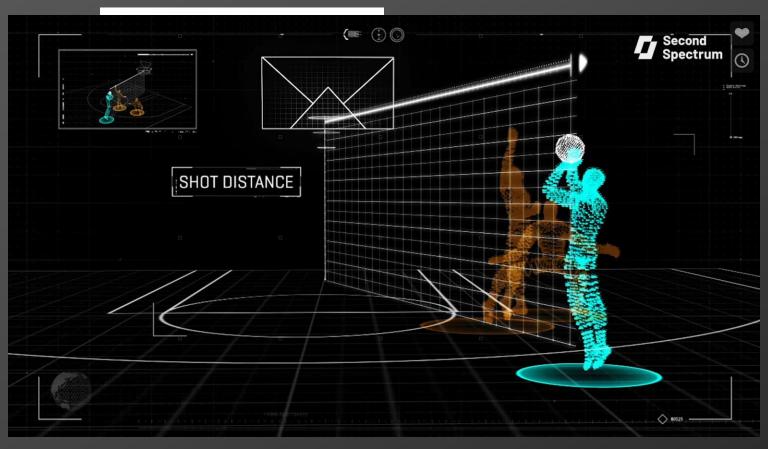
SportVU Technology via STATS







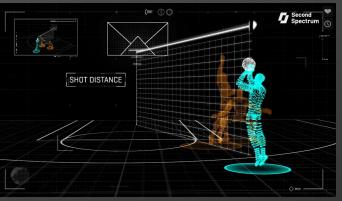




Second Spectrum

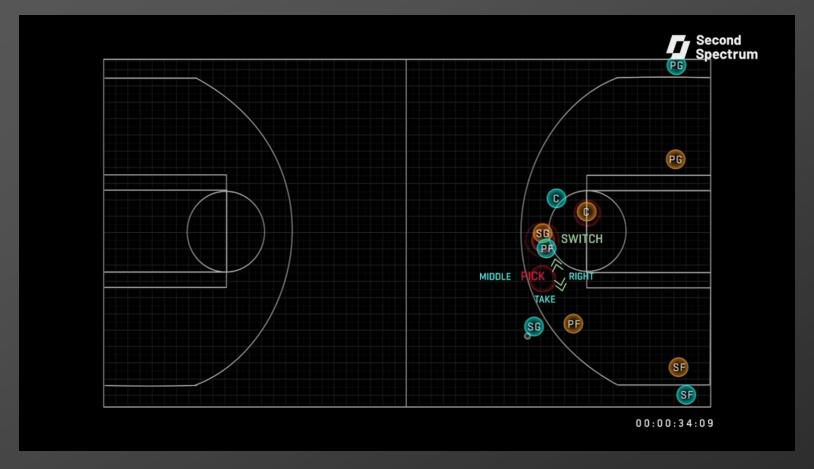








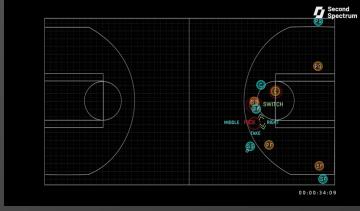


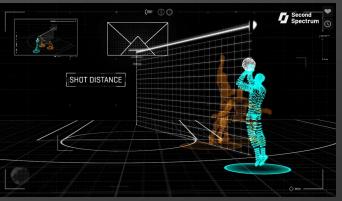


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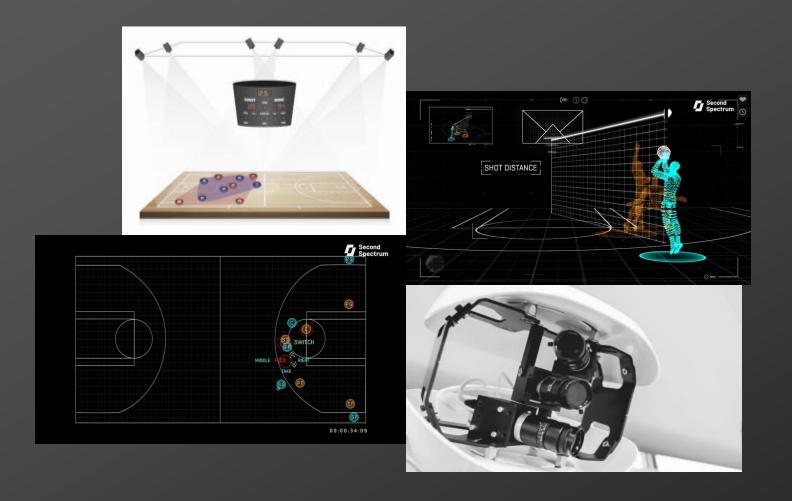


III. S



Automated Cameras via Synergy Sports















New stories and narratives about why teams and players succeed



Challenges

They are typically not trained as statisticians or computer scientists

How to make the massive data and analytics available to them?

How to help them sift through the vast amount of data and find insights?

Availability

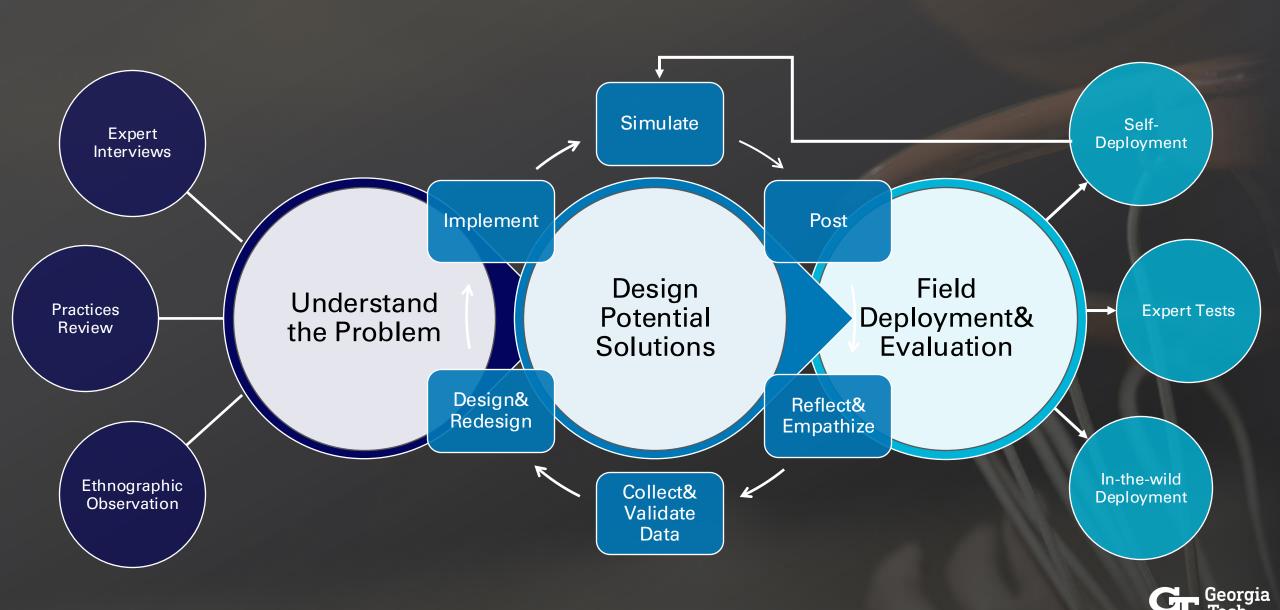
Exploration

Engagement

Credibility

How to make the boring numbers more engaging to their audiences?

How to support their narratives and make them more credible?

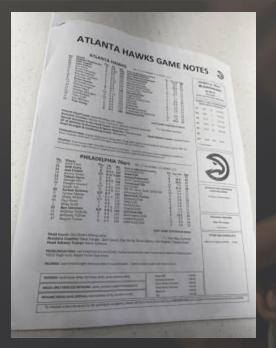


Expert Interviews

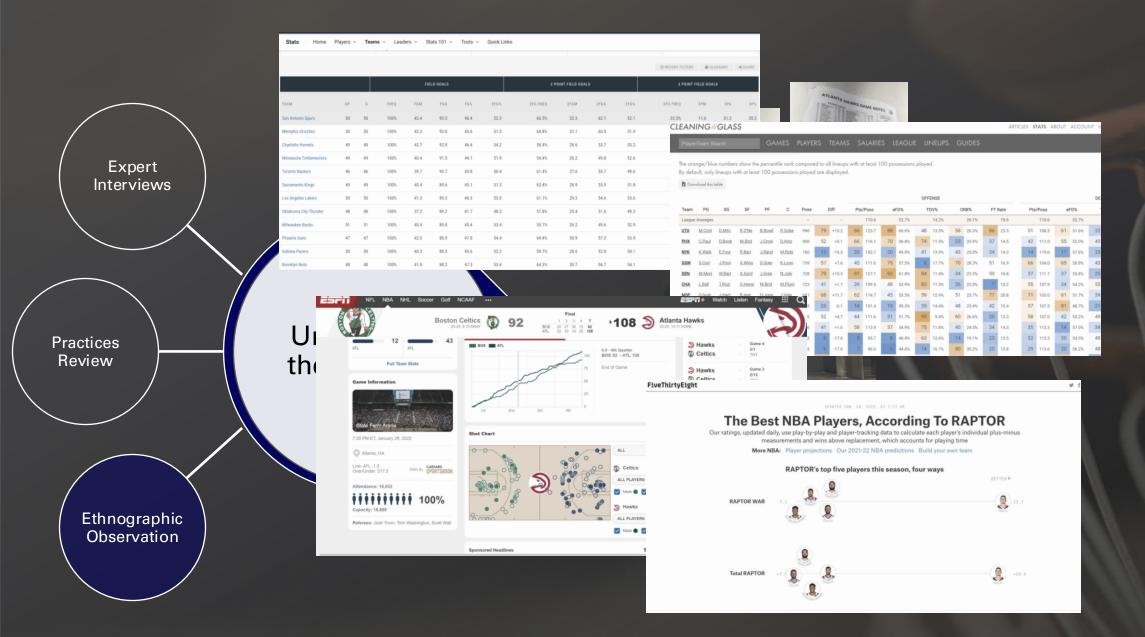
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Ethnographic Observation

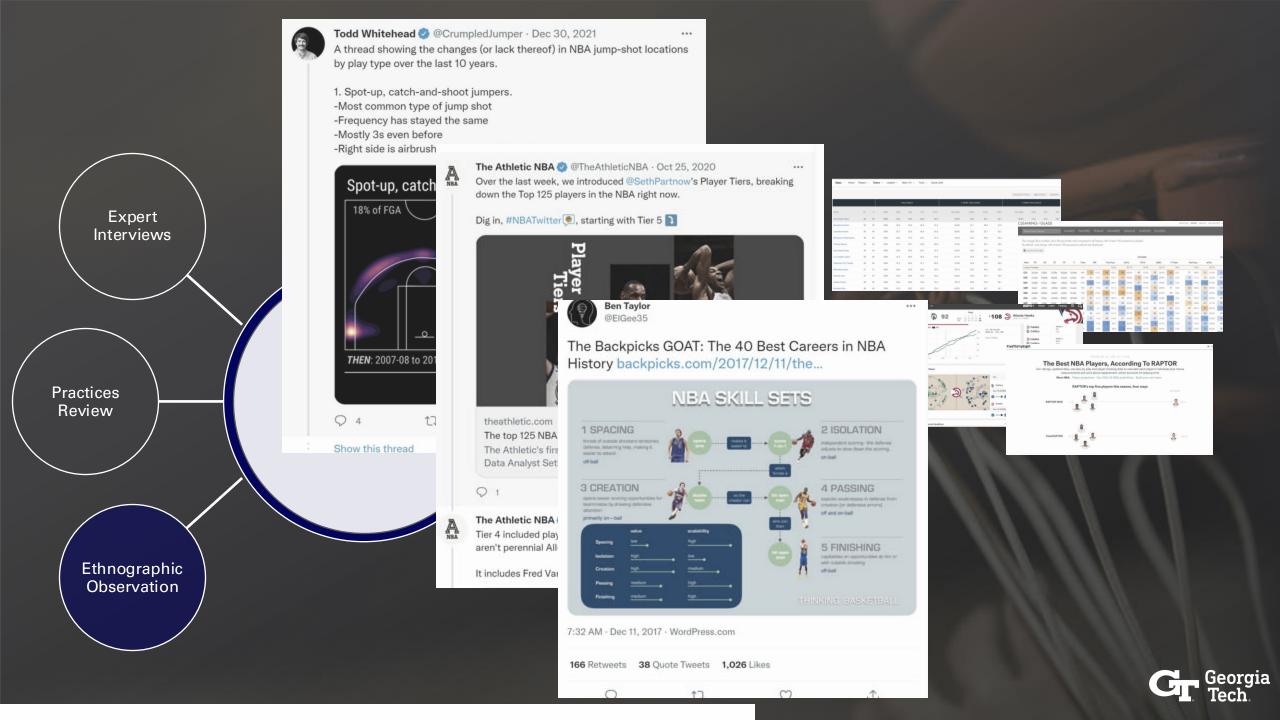
Practices Review









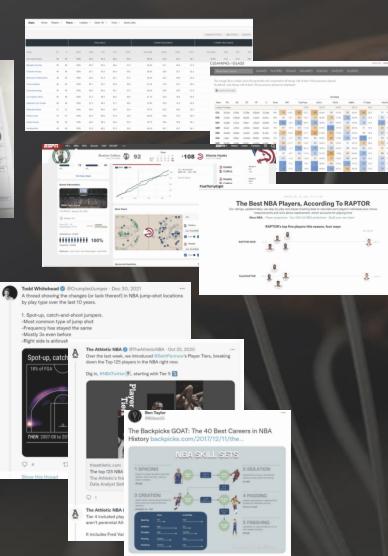


Expert Interviews

Practices Review

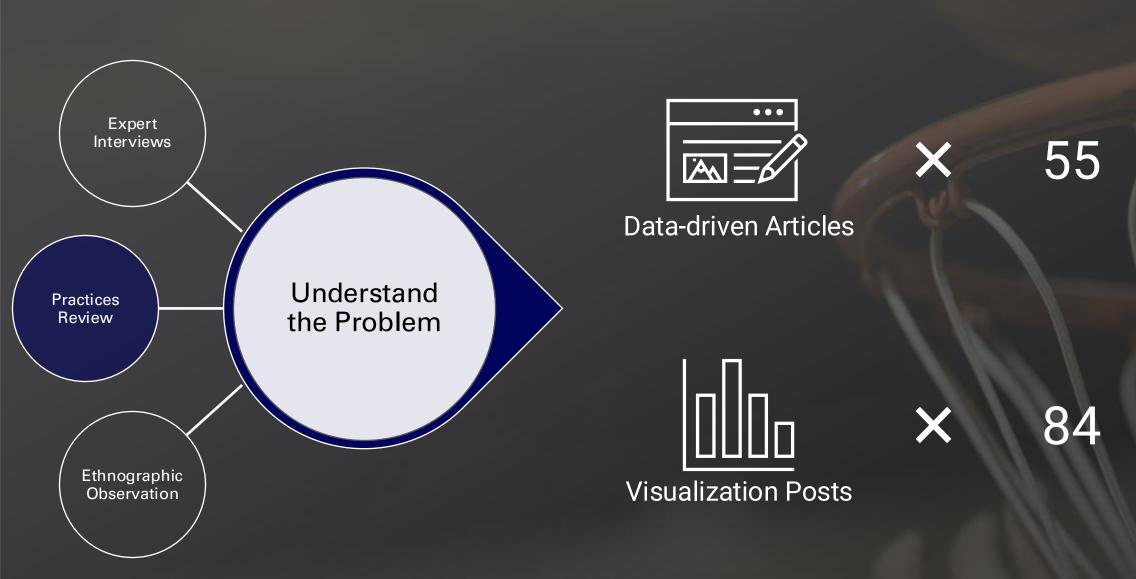
Understand the Problem



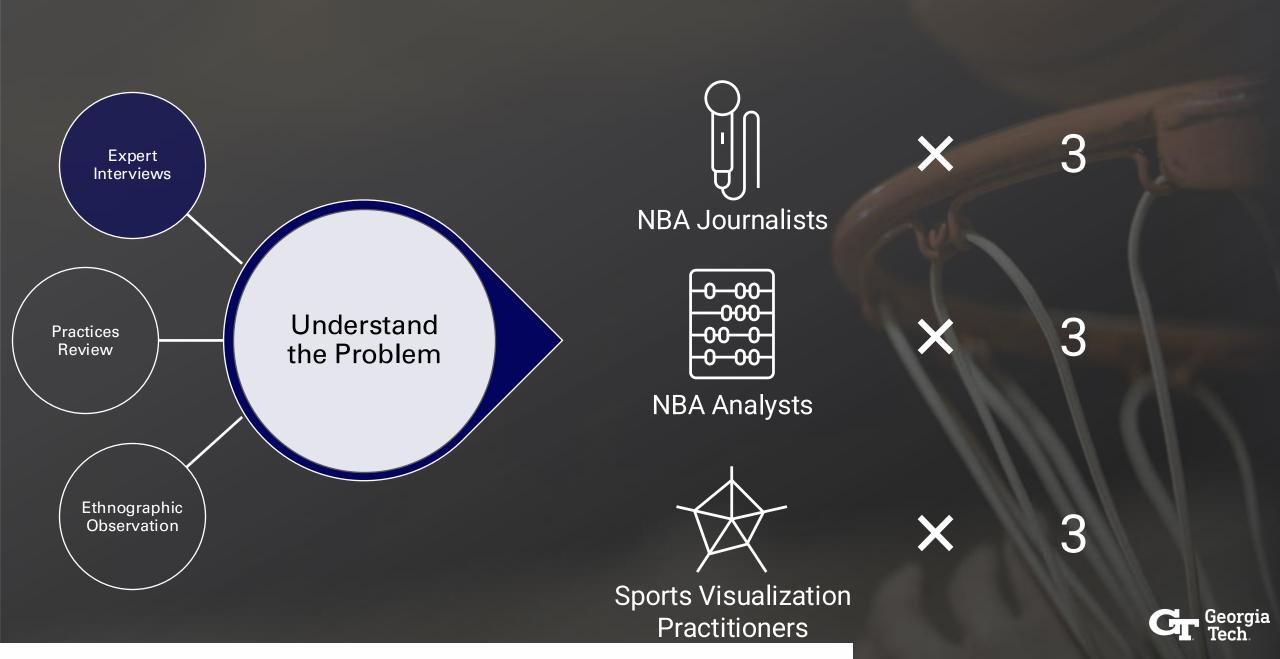


Ethnographic Observation









F1. Towards faster yet credible digital journalism

F2. The increasing role of sports analytics in sports journalism

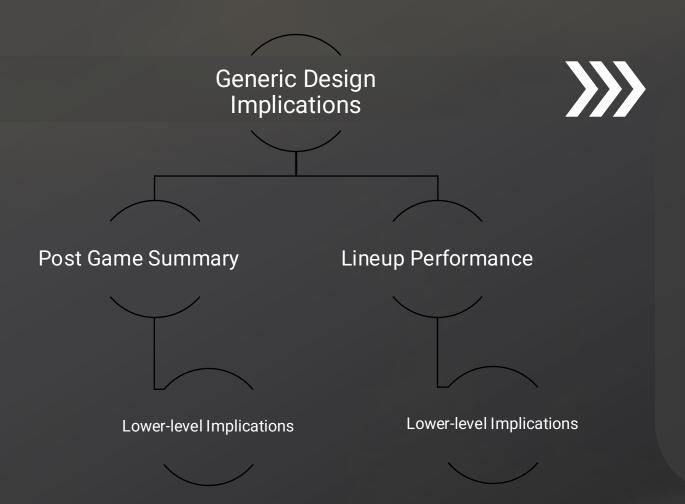
F3. Spreadsheets are prevalent to explore and present data

F4. Static author-driven visualizations are prevalent

F5. Towards broader sports media and fluid roles





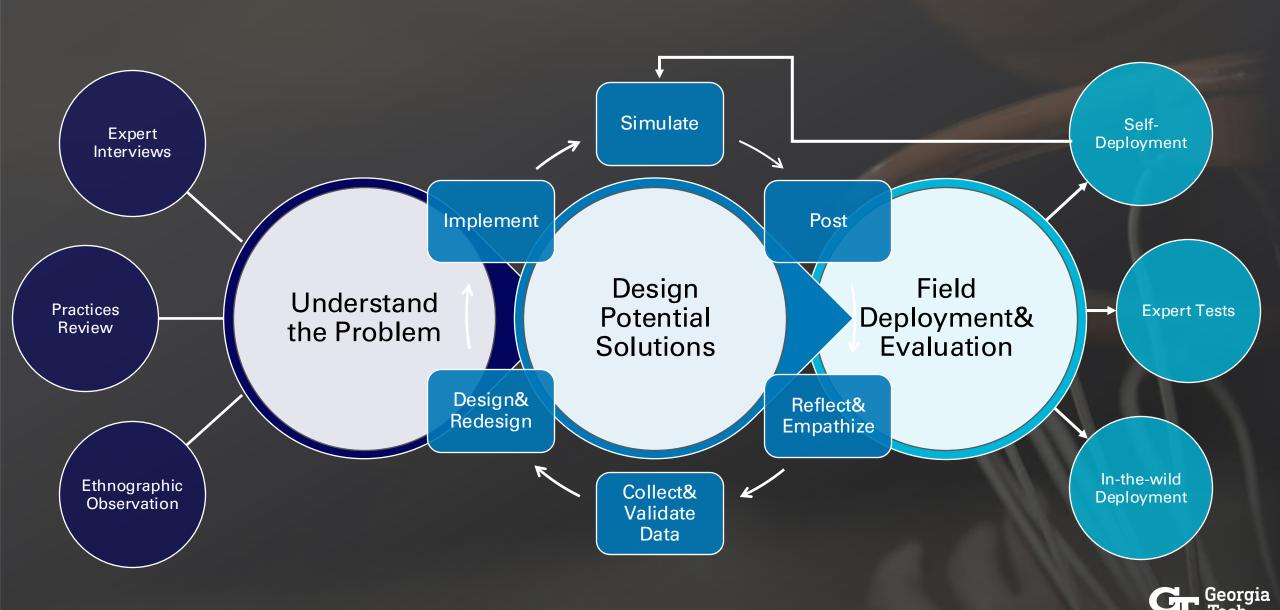


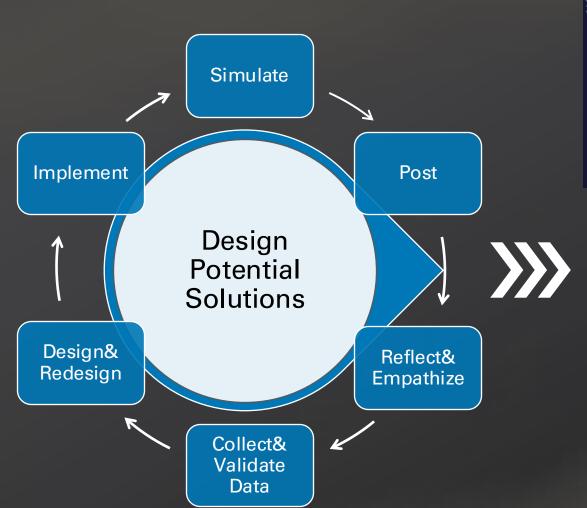


DESIGN IMPLICATIONS

- Automate the data pipeline, support rapid largescale visualization
- Be resilient to diverse needs and reporting styles
- Accelerate information retrieval and sense-making process
- Support "drilling-down" exploration and analysis with interactivity
- Provide charts that sportswriters can use to communicate the insights and support their narratives









NBA GameViz



NBA LineupViz



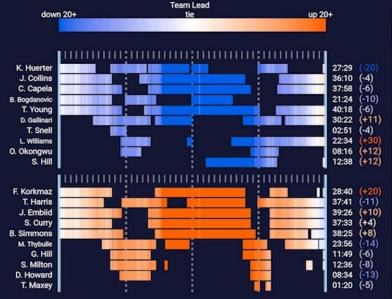


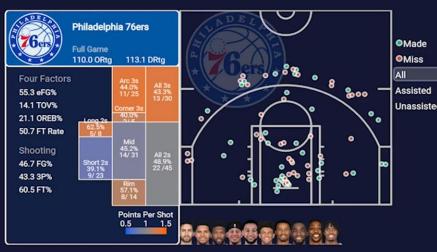


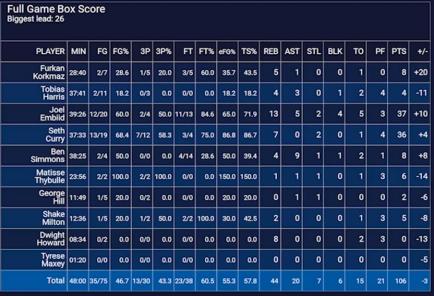
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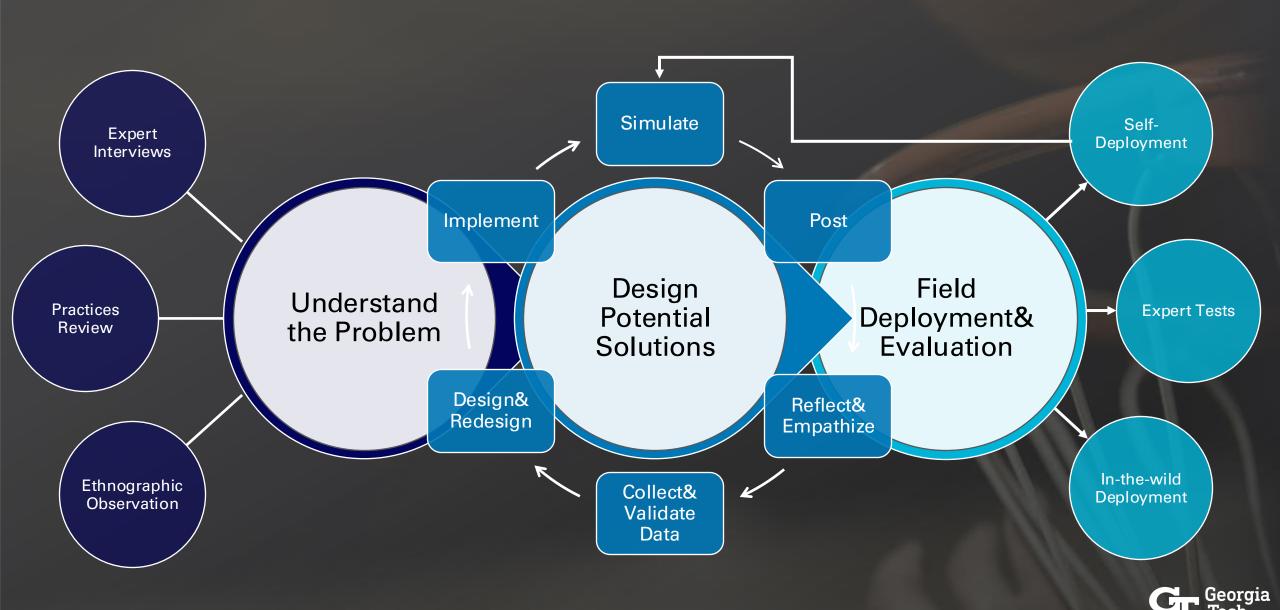
Atlanta Hawks @ Philadelphia 76ers

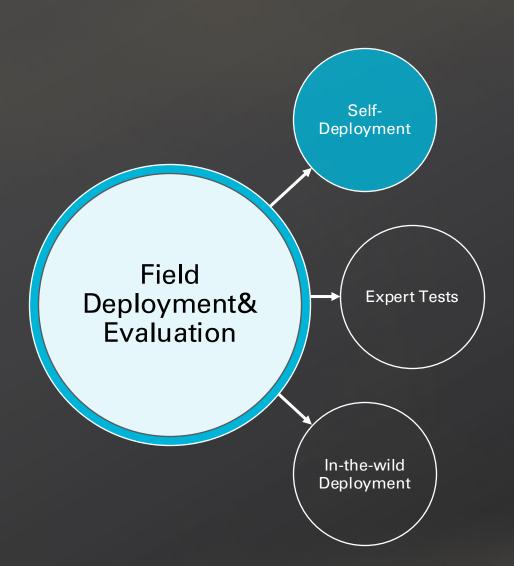
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*You can click on quarter scores or use the brush to select a specific time window *Click on team names or finals scores will return to Full Game											
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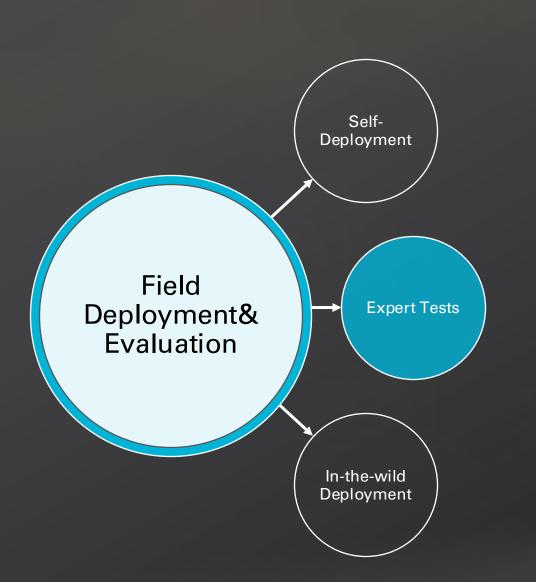






× 300+







X

6

Expert Test



Demonstration & Think aloud



Post-study Interview





REFLECTION & DISCUSSION

Existing artifacts as Towards visual data Field deployment as Data literacy & Design implications anchors storytelling a method education Visual components Bridging the gap Social impact Make interactivity visible Cope with limited space On Visualization From Exploration To On Field Implications For Broader Impacts Systems Communication Deployment Other Sports

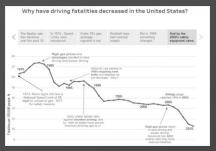




From Exploration To Communication

 Call for authoring tools that further lower the technical bars

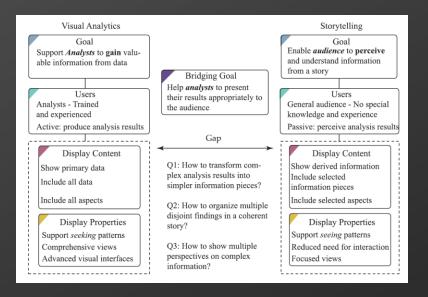






Ellipsis (Satyanarayan & Heer, 2014) & Tableau Story Point & Idyll Studio (Conlen et al, 2021)

Bridge the gap between exploring data and communicating insights



Chen et al. 2020 Supporting Story Synthesis: Bridging the Gap between Visual Analytics and Storytelling



THANK YOU!

Questions?

