

Revolutionizing Revenue

Data Analytics for Seamless Billing

Introductions

Chris Kirk

Chief Financial Officer for LittleStar ABA. He has been with LittleStar since 2012 overseeing the billing team, compliance department and now the accounting team.

Chris, in 2023, oversaw the creation of a billing company helping other ABA providers with billing and clinical consulting.

Nathan Rinard

Director of Product Development in Data & Analytics Services at Moser Consulting, he leads teams responsible for the development & implementation of the Honeycomb Platform as well as advanced analytics initiatives leveraging tools such as AI, LLM's and ML.

As a trusted advisor, Nathan is passionate about helping organizations, in a diverse range of industries, drive value from their data.



5 Divisions

Healthcare Experience

Analytics

Infrastructure

Managed IT

App Development

Abstract

In the dynamic landscape of Applied Behavior Analysis (ABA), the intersection of technology and billing practices has the potential to redefine how ABA providers navigate the financial realm. This presentation explores the transformative power of data analytics in revolutionizing revenue generation and billing processes within the ABA services framework.

Key Themes and Topics:

The Data-Driven Advantage: Uncover how harnessing the power of data analytics provides ABA providers with a competitive edge in billing accuracy, efficiency, and overall financial management.

Navigating the Billing Landscape: Dive into the challenges and complexities of ABA billing and discover how data analytics solutions offer a seamless and strategic approach to overcoming obstacles.

Real-world Applications: Explore a real-life case study showcasing successful implementations of data analytics in ABA billing. Learn how LittleStar has achieved financial optimization through insightful data-driven decision-making.

Strategies for Implementation: Gain practical insights into integrating data analytics into existing billing practices. Understand the steps, tools, and considerations for a successful transition towards a more streamlined and data-centric billing approach.

Impact on Revenue Maximization: Delve into the tangible benefits of incorporating data analytics, including increased accuracy in coding, improved reimbursement rates, and enhanced financial sustainability for ABA businesses.

Agenda

- Navigating the Billing Landscape
- What is Data Analytics in '24?
- Real-world Applications
- Strategies for Implementation



The Billing Landscape

Billing Landscape

- ABA practice management
 - Reporting
 - Frequency of system transitions
 - Picking the right system
 - Clinical vs Operations
- Multiple Systems Communicating
 - HR vs Data Collection vs Billing

Billing Landscape

- Clearinghouse requirements
 - Claim scrubbing
 - Payer requirements
 - Modifier violations
 - Overlapping
 - Taxonomies

Data Analytics in 2024

Hybrid & Multi-cloud

- In 2019, 58% actively using more than one cloud provider.¹
- In 2020, 76%.²
- In 2023, 98%.³



Why

- Avoiding Vendor Lock-in
- Best-of-Breed Services
- Business Continuity
- Disaster Recovery
- Cost Optimization
- Innovation



How is this relevant?



Your Data Is Dispersed



Data Quality and Consistency

Dispersed data sources have varying levels of data quality, completeness, and accuracy. Inconsistencies in data definitions, data entry processes, and data governance practices lead to discrepancies when attempting to report on the consolidated data.

Data Timeliness and Synchronization

When data is distributed across various locations or systems, ensuring that the data is up-to-date and synchronized can be a challenge.

Data Accessibility

Accessing dispersed data can be hindered by incompatible systems or security restrictions. Proprietary systems can make it difficult to retrieve and aggregate data from multiple sources.

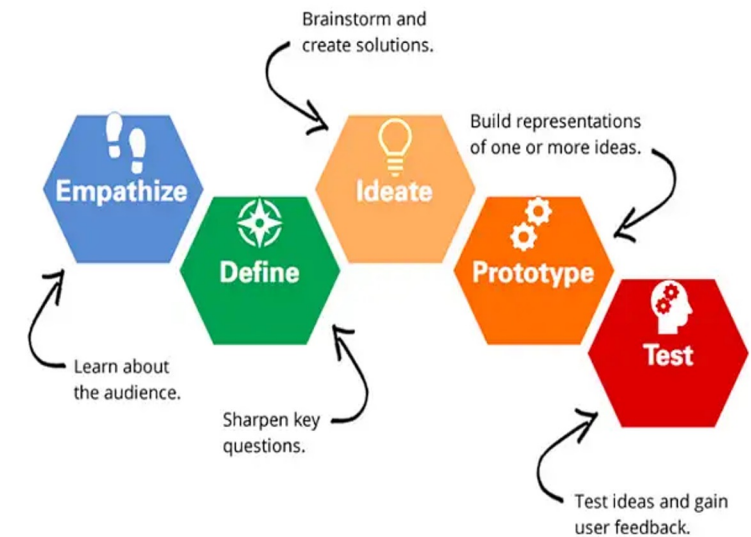


Implementation Strategies

Business Requirement Analysis

- Identify and Engage Stakeholders
- Identify Organizational Goals
- Identify Data Sources

Design Thinking



Traditional Data Analytics

1 Data Collection



2 Data Preparation



3 Data Visualization



4 Data Analysis



5 Data Storytelling



www.effective-datastorytelling.com

- *Decision Making*
- *Monitoring*
- *Data Exploration**
- *Collaboration*
- *Communication*
- *User Empowerment*
- *Accountability*

Accessible

Secured

Governed





Remove Data Silos to..

- *Improve accessibility & Sharing*
- *Enhance Data Quality*
- *Provide Meaningful Insights*
- *Improve Efficiency*
- *Enhance Customer Experience*
- *Increase Innovation*



Image from Snow White and the Seven Dwarfs (1937 film) © The Walt Disney Company



Real World Applications



UTILIZATION

TRIALS

ASSESSMENT

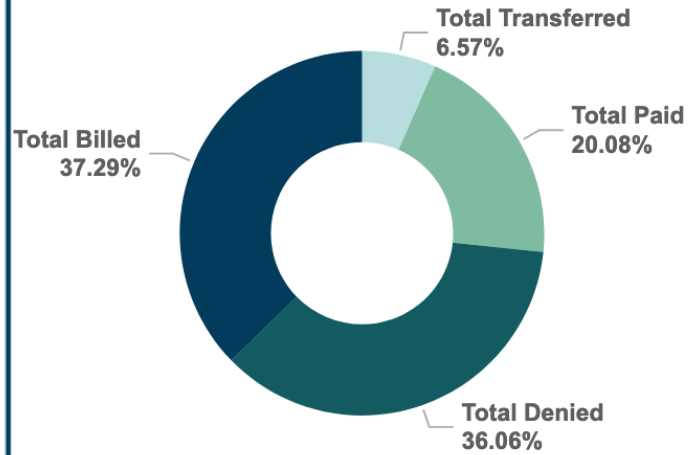
Utilization Rate ▾

Patient Name ▾

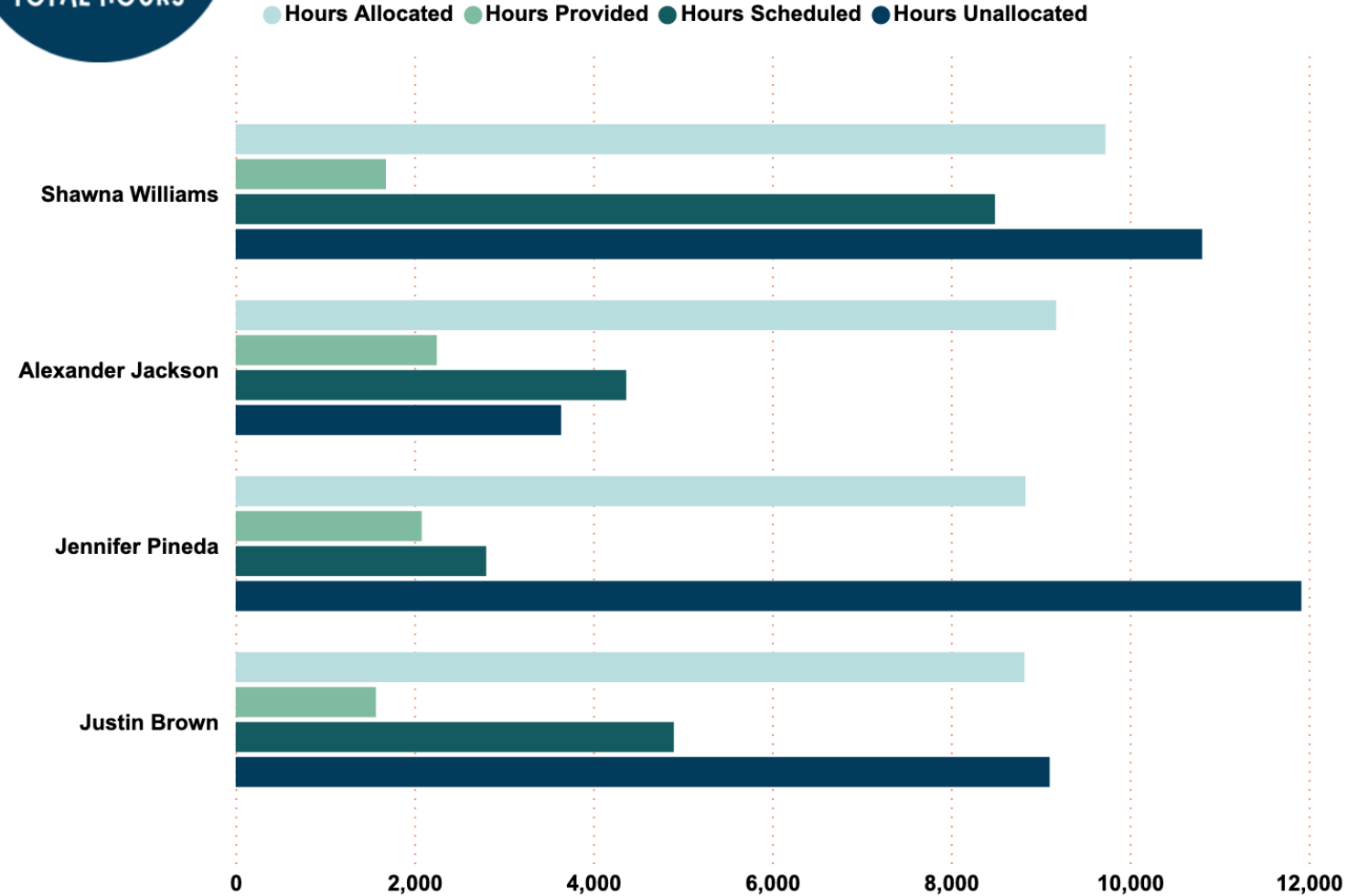
Program ▾



CLAIM TOTALS



TOTAL HOURS



TOTAL PATIENTS

217



= 10 PATIENTS

92%
HIGHEST
UTILIZATION

27%
LOWEST
UTILIZATION

81%
HIGHEST
PROGRAM
UTILIZATION

67%
LOWEST
PROGRAM
UTILIZATION



Claim Status

Approved

Pending

Procedure Code

All

Pay Source

All

Bill Date

All

Billing

Total Billed

\$135.05K

Total Applied

\$1.00K

Claims

Most Claims

Paysource - 2

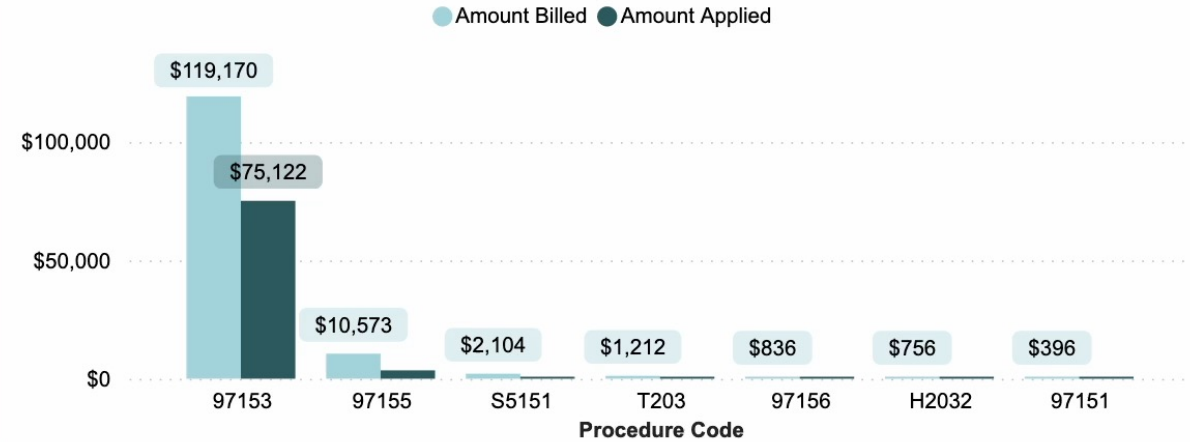
Total Pending

\$131.01K

Total Claims

194

Amount Billed vs Amount Applied



Approved Claims



Bill Date	Client	Provider	Minutes	Insurance Company
11/6/2023	April Bowen	Ashley Phillips	443.00	Paysource - 20
11/6/2023	April Bowen	Ashley Phillips	468.00	Paysource - 20
11/6/2023	Brittany Morris	Mark Duke	480.00	Paysource - 27
11/6/2023	Diana Hernandez	Tracy Robinson	240.00	Paysource - 2
11/6/2023	Diana Hernandez	Tracy Robinson	271.00	Paysource - 2
11/6/2023	Diana Hernandez	Tracy Robinson	312.00	Paysource - 2
11/6/2023	Diana Hernandez	Tracy Robinson	480.00	Paysource - 2
11/6/2023	Erica Arnold	Tracy Robinson	53.00	Paysource - 2
11/6/2023	Erica Arnold	Tracy Robinson	59.00	Paysource - 2
11/6/2023	Erica Arnold	Tracy Robinson	422.00	Paysource - 2



\$3.62M
Total Outstanding

Paysource - 2
Most Outstanding

Patient
All

Insurance Company
All

AR Aging by Insurance Company



by Insurance by Patient

Insurance Company	Patient	Outstanding	Days Outstanding						
			0-30	31-60	61-90	91-120	121-150	151-180	181-210
Paysource - 3	Willie Perry	\$55,323.48	\$12,480.00	\$19,580.88	\$7,472.00	\$6,656.00	\$0.00	\$1,456.00	\$2,686.60
Paysource - 3	George Holland	\$78,844.62	\$11,648.00	\$28,926.56	\$22,912.32	\$7,009.12	\$2,981.12	\$2,496.00	\$0.00
Paysource - 9	Donald Hendricks	\$59,080.00	\$10,336.00	\$31,058.00	\$7,744.00	\$0.00	\$6,051.00	\$3,451.00	\$440.00
Paysource - 3	Steven Williams	\$15,491.00	\$8,596.00	\$6,895.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 23	Gregory Bates	\$13,023.00	\$8,209.50	\$4,813.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 23	Sharon Payne	\$9,421.00	\$8,061.00	\$1,360.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 9	Vincent Diaz	\$16,226.00	\$7,970.00	\$7,576.00	\$680.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 3	Marissa Greene	\$17,100.00	\$7,673.00	\$9,233.00	\$194.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 3	Jessica Burns	\$21,239.00	\$7,624.50	\$13,614.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 3	Christopher Green	\$12,305.00	\$7,594.50	\$3,350.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 2	Andrea Vaughan PhD	\$17,721.60	\$7,488.00	\$10,233.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 3	Michael Murphy	\$38,587.00	\$7,479.00	\$15,073.50	\$16,034.50	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 9	James Sanchez	\$27,372.00	\$7,442.50	\$19,929.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 14	Suzanne Johnson	\$22,207.00	\$7,418.00	\$12,435.00	\$994.00	\$0.00	\$0.00	\$1,360.00	\$0.00
Paysource - 3	Mr. Bradley Rasmussen DVM	\$15,327.50	\$7,399.50	\$6,515.00	\$616.00	\$0.00	\$797.00	\$0.00	\$0.00
Paysource - 3	Lori Roman	\$16,331.50	\$7,382.00	\$8,949.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 3	Heather Sims	\$13,156.00	\$7,249.50	\$5,906.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 3	Whitney Wolfe	\$15,303.50	\$7,242.50	\$8,061.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Paysource - 14	James Hutchinson	\$14,613.00	\$7,230.00	\$7,383.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total		\$3,623,246.09	\$734,741.83	\$1,813,721.08	\$477,097.14	\$223,645.78	\$101,769.99	\$66,128.44	\$61,075.10



FILTERS

Denial Code

All

Procedure Code

All

Insurance Company

All

Bill Date

All

Billing

Total Billed

\$3.80M

Total Applied

\$1.34M

Claims

Most Denied Claims

Paysource - 2

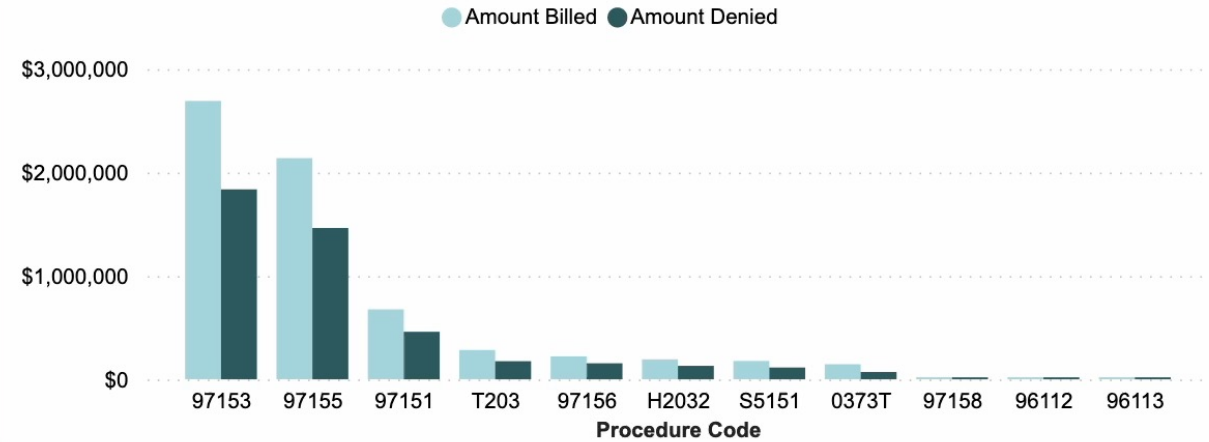
Total Rebilled Claims

12

Total Denied Claims

271

Amount Billed vs Amount Denied



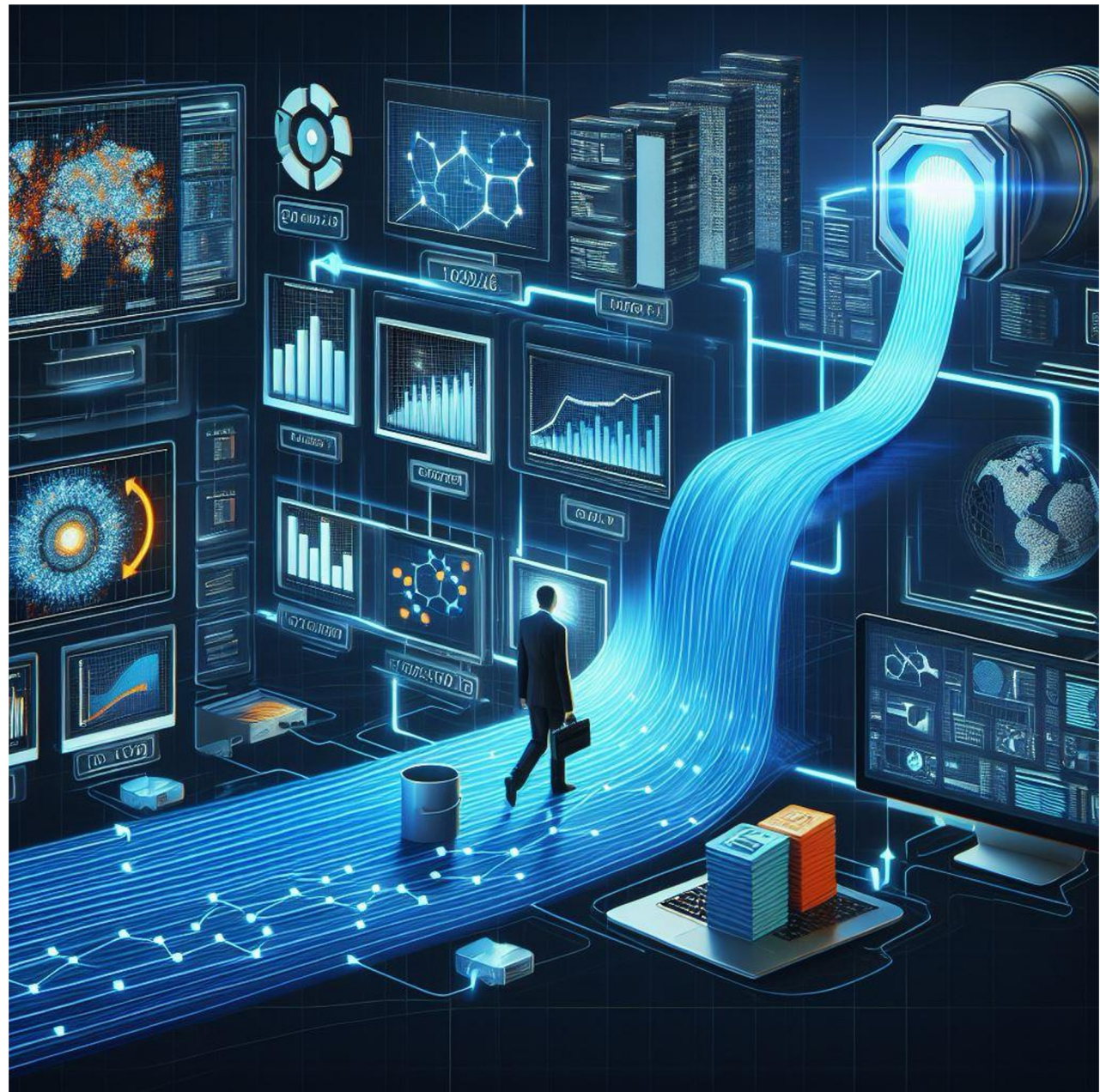
Top 3 Denial Codes

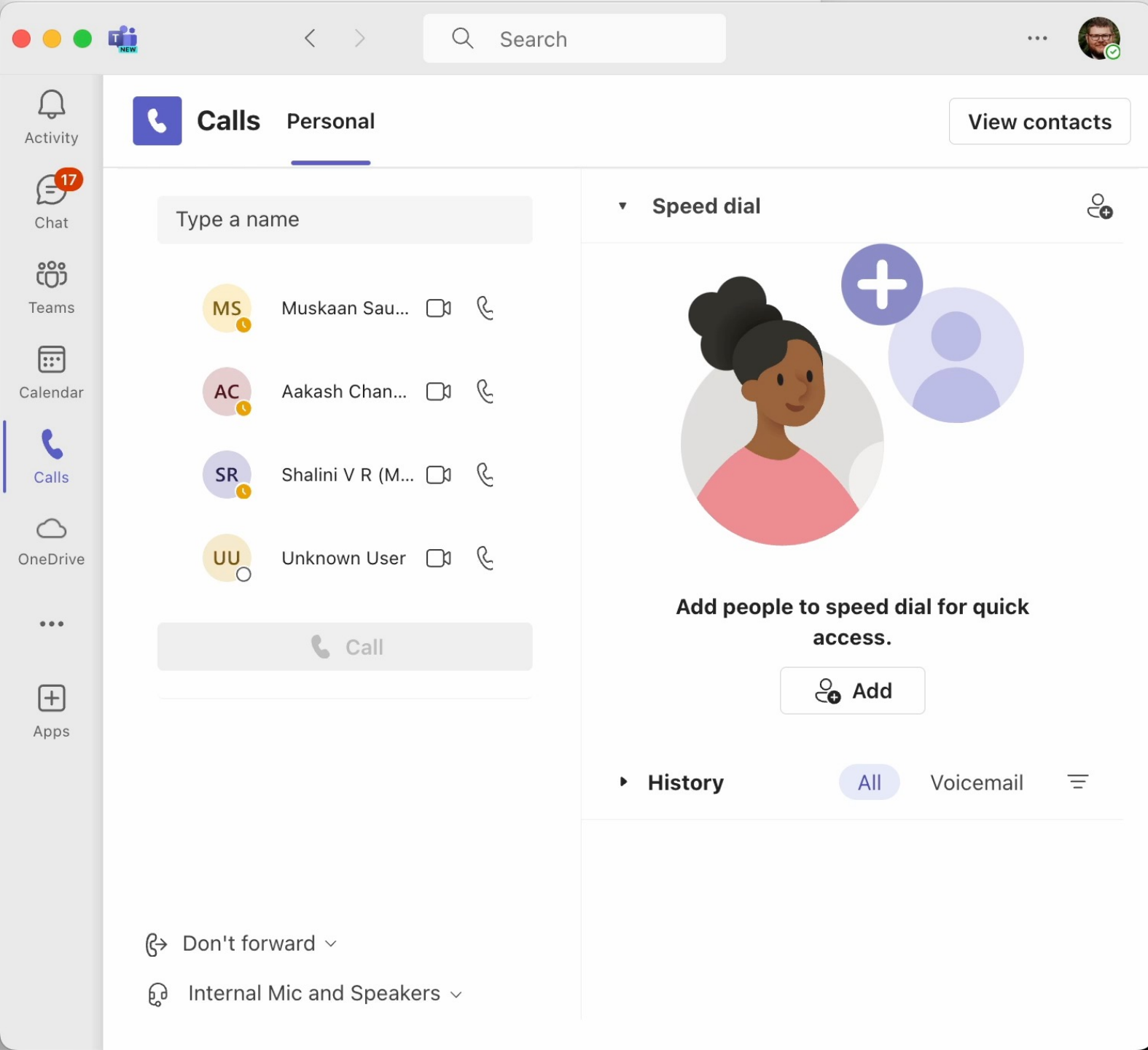
Denial Code	Amount Billed
45	\$3,445,859.13
18	\$75,746.00
197	\$37,720.00

Bill Date	Patient	Provider	Insurance Company	Minutes	Amount Billed	Hourly Rate	Amount Denied	Denial Code	Balance
11/9/2023	Matthew Hall	Michael Guzman	Paysource - 5	30.0	\$84.05	\$168.10	\$12.06	45	\$71.99
11/7/2023	Timothy Clark	Ann Hernandez	Paysource - 4	393.0	\$1,275.00	\$194.66	\$637.50	45	\$637.50
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	26.0	\$85.00	\$196.15	\$22.50	45	\$62.50
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	30.0	\$97.00	\$194.00	\$34.50	45	\$62.50
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	53.0	\$176.00	\$199.25	\$51.00	45	\$125.00
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	58.0	\$194.00	\$200.69	\$69.00	45	\$125.00
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	60.0	\$170.00	\$170.00	\$45.00	45	\$125.00
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	83.0	\$291.00	\$210.36	\$103.50	45	\$187.50
11/3/2023	Cindy Gutierrez	Daniel Richards	Paysource - 45	113.0	\$388.00	\$206.02	\$138.00	45	\$250.00
Total					\$3,334,832.31		\$2,111,512.77		\$1,223,319.54

What about...

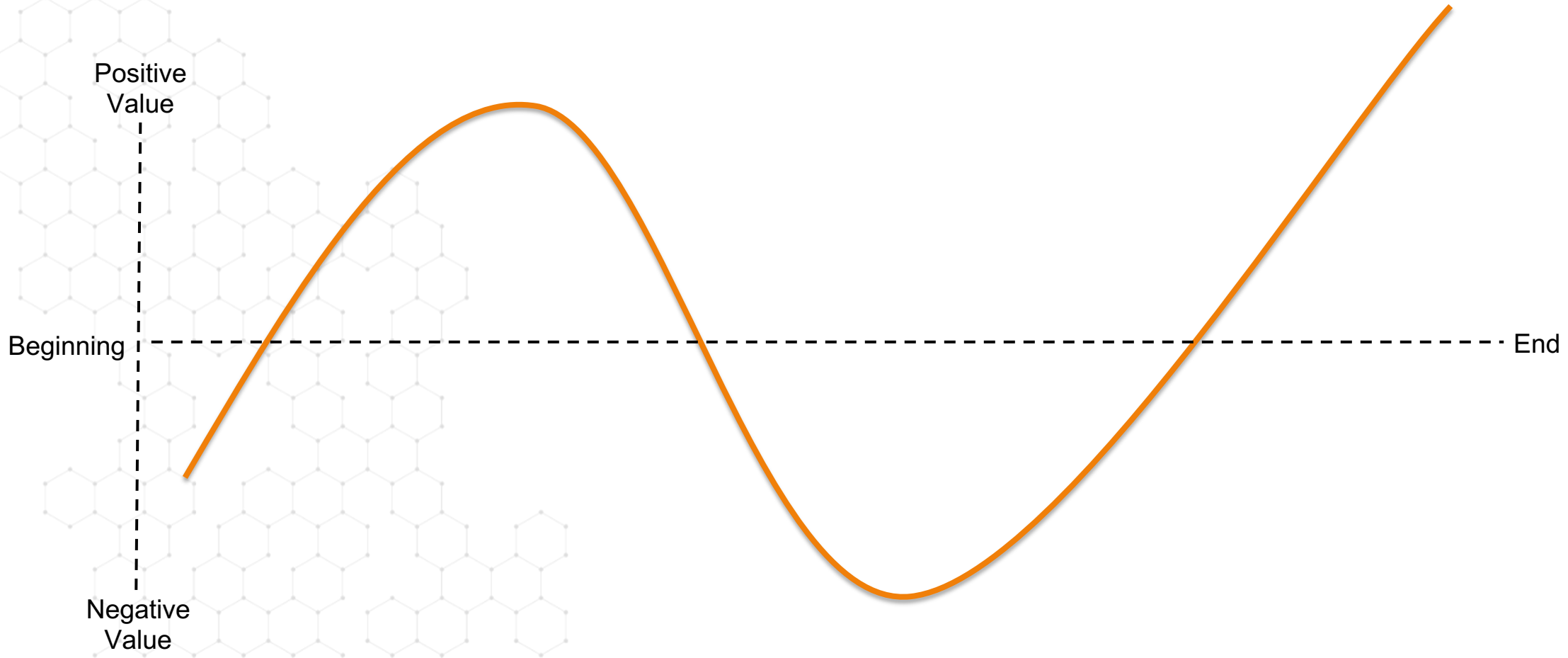
- AI
- ML
- LLM's
- Computer Vision
- Chat Bots





- Utilizes existing Honeycomb Datawarehouse
- Secure: Data stays in your tenant
- Easily scales to incorporate Document Retrieval and AI Vision

It's Not Trivial



Questions?



Thank You for Your Time

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Nathan Rinard

Director of Product Development | Moser Consulting Inc.

Nathan.Rinard@moserit.com



Appendix





Moser Consulting

Divisions Overview



Our Vision

To become a **strategic partner**, who innovatively applies technology and techniques to help clients deliver **business value**.

Our Mission

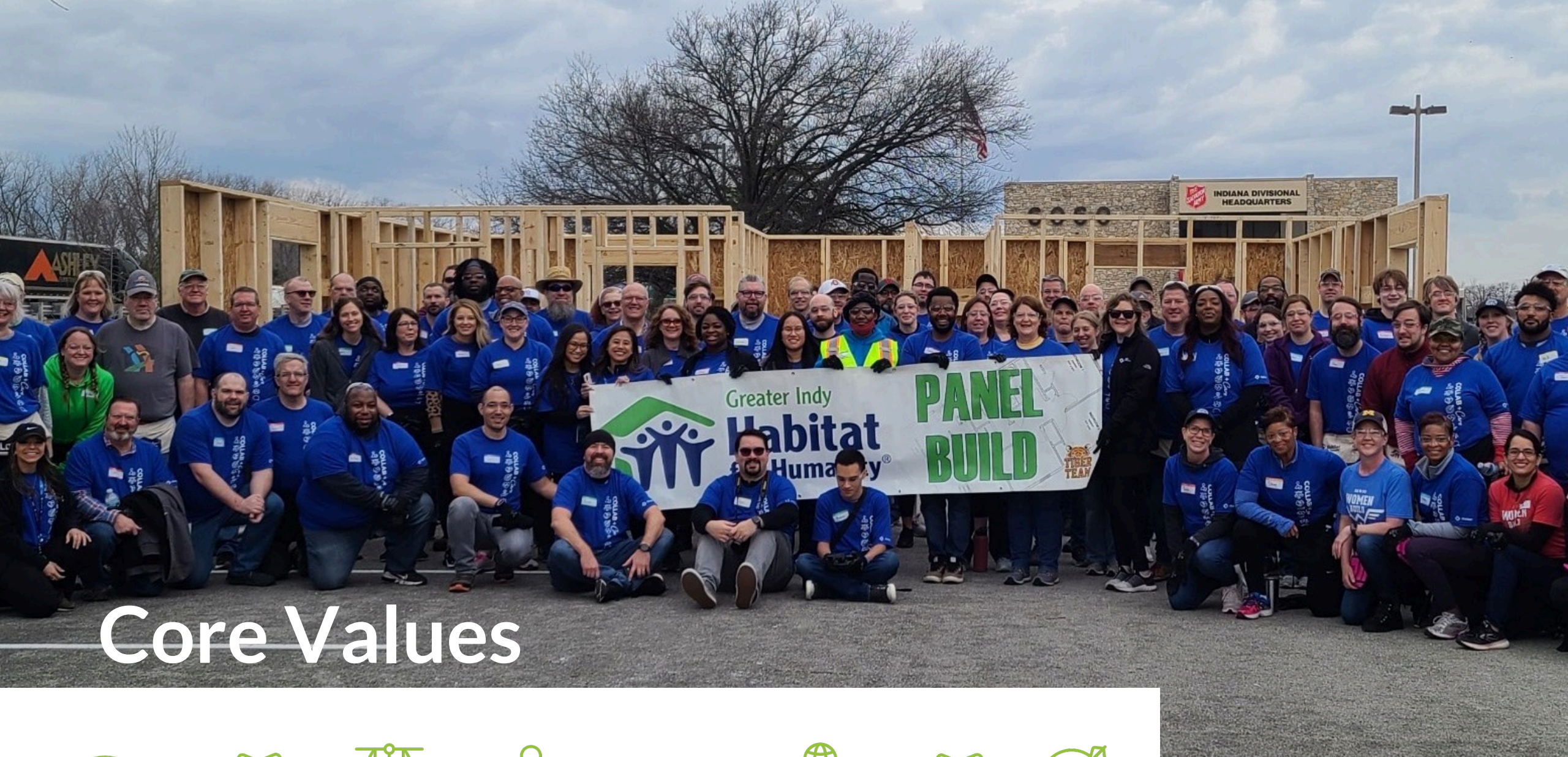
To design the **right solutions**, implement the best practices, increase our expertise in both technology and every client's **business strategy**.



27 Years in the making

From one person, to 300 experts





Core Values



Transparency



Collaboration



Balance



Accountability



Support



Social
Responsibility



Integrity



Focus





5 Divisions



Application Services

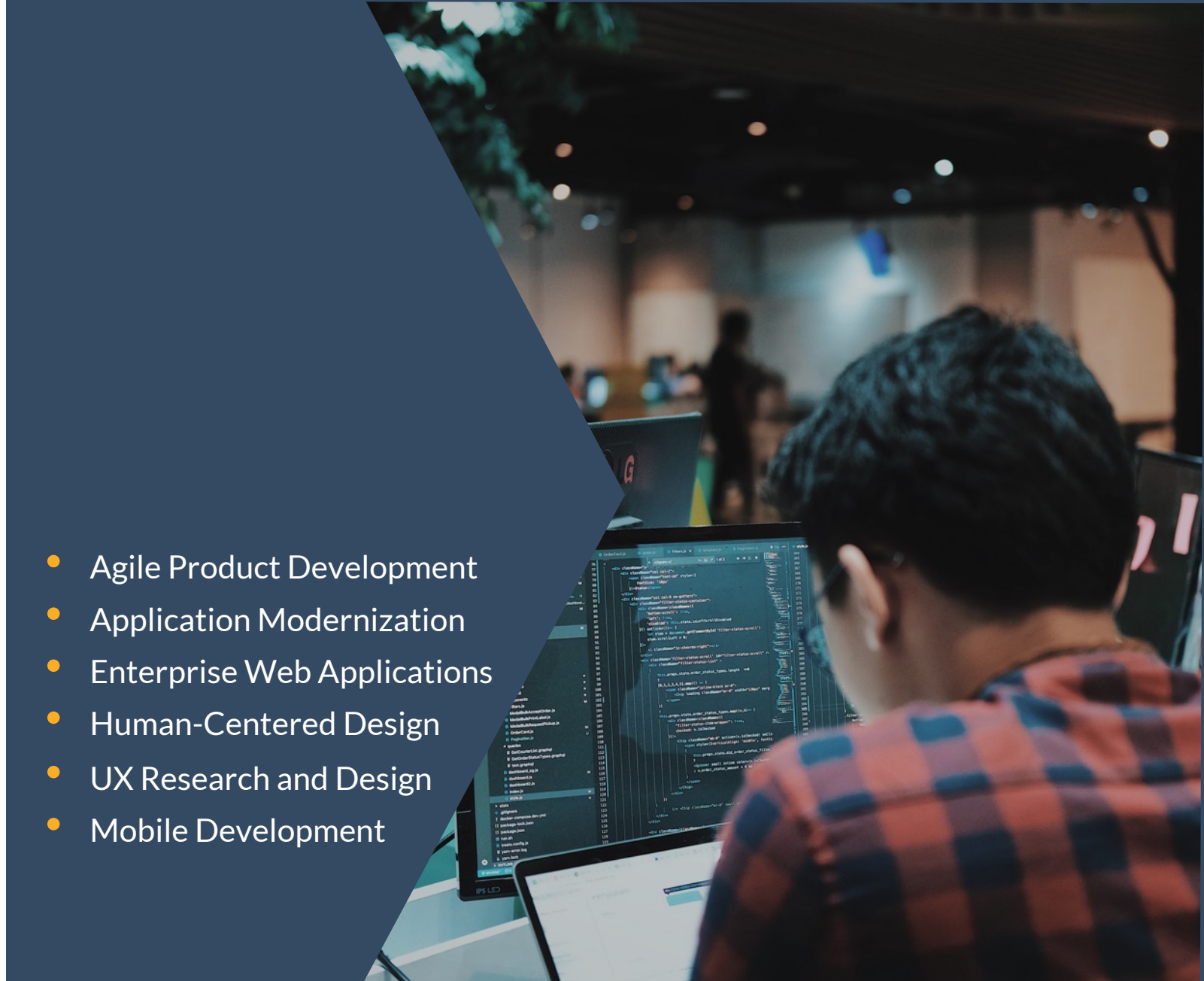
Product Management

Moser Labs

Software Engineering

Strategy

- Agile Product Development
- Application Modernization
- Enterprise Web Applications
- Human-Centered Design
- UX Research and Design
- Mobile Development





Business Services

Business Strategy

Learning Services

Quality Assurance

PMO Portfolio Services

- Business Analysis
- Business Process Management
- Group and Individual Training
- Information Assurance
- GRC - Governance Risk and Compliance
- Project Management
- Quality Engineering
- Security Training





Core Technologies

Managed Services

Professional Services

Consultancy Services

- IT Strategy Services
- IT Managed Services
- Service Desk Operations
- Voice Services
- System & Cloud Architecture
- Network Architecture
- Automation & DevOps
- Hardware/Software





Data & Analytics Services

Analytics

Data

Governance

Strategy

- Power BI, Tableau, Databases SQL, MySQL, Oracle, PostgreSQL, Hadoop
- Data Management as a service
- Data Integrity and Security
- Enterprise data services
- Honeycomb (AaaS)
- Insights from information





Government Services

PMO & Delivery Assurance

Quality Management

Security & Compliance

Solutions Architecture

System Engineering

- Federal, State, and Local Contracts
- Diverse network of relationships
- GSA IT70 Contract Holder