Energy Data Center: Implementation Considerations

Unified Tracking of Energy Efficiency Programs

Data Input

Outputs

Utilities

Contractors/
Third Parties

Customers

Collaboration
Platform

Reporting

Financial
System

Enrollment
Fulfillment Tracking
Energy Usage Analysis
Security
Financial/Admin

Direct TECHNOLOGY

Energy Solutions Group
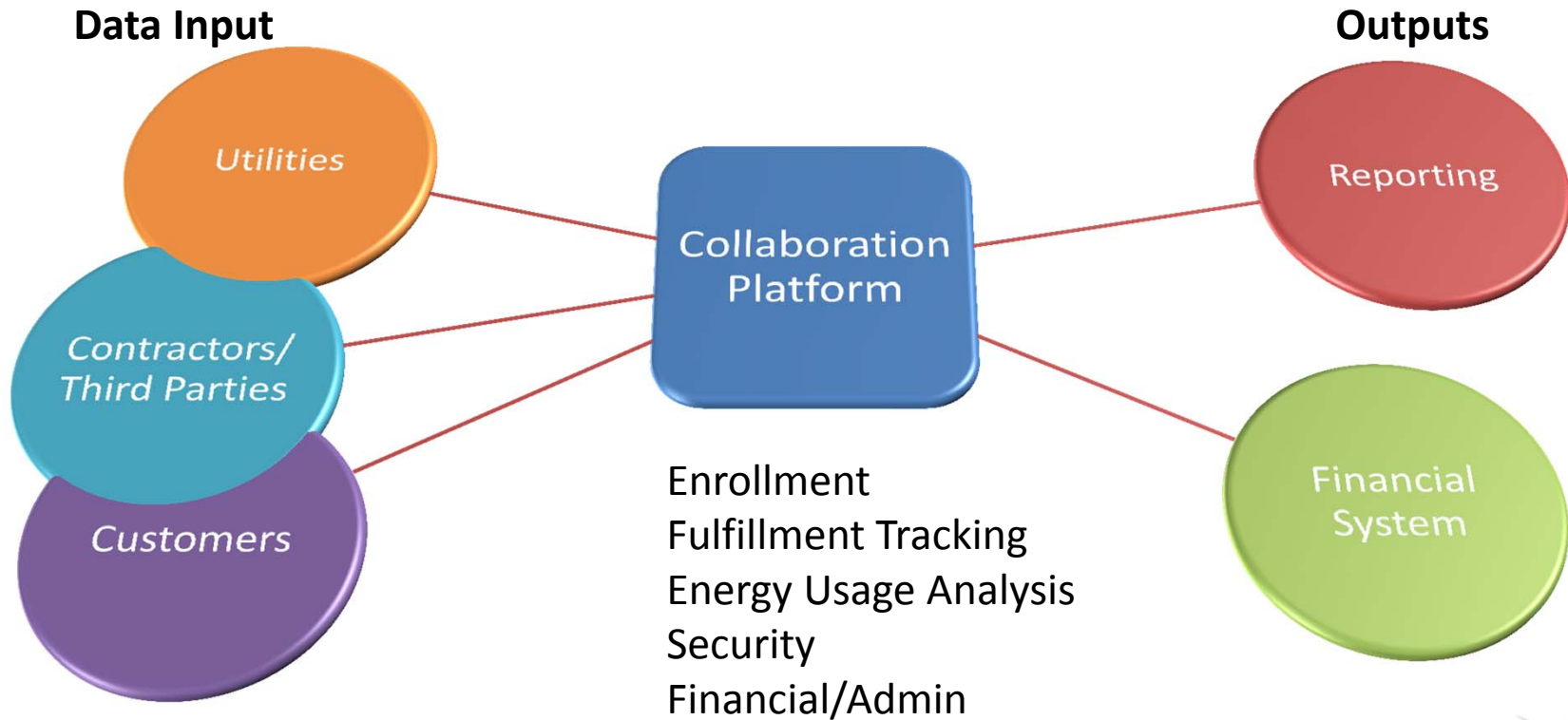
Our Customers

PG&E

SCE

SCG

SDG&E

Efficiency Maine

Southern Company

- Alabama
- Georgia
- Gulf
- Mississippi

Direct TECHNOLOGY

Energy Solutions Group

Problem: Duplicating Measures
Solution: Joint Utility Database
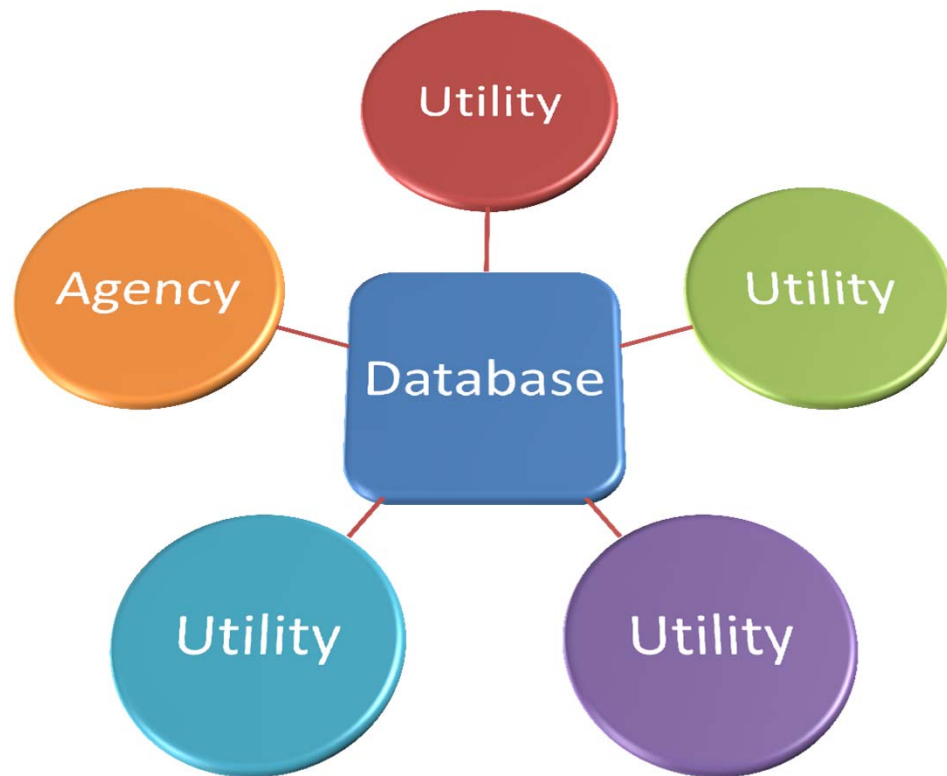
A Centralized Enrollment Database for utilities and agencies to prevent duplication of payment for measures

Security

Data Sharing Agreements

- Access to shared data is restricted based on joint Data Sharing Agreements
- Each agency can approve / deny access by other agencies.

Secure Data

- Access to the database is made through secure web service calls
- Data are stored securely in a SQL Server Database
- Access is unidirectional - all requests are initiated by agency-owned systems. The Shared Database does not make outbound connections

Drivers

The Shared Database supports sharing education costs for enrollments in joint territories.

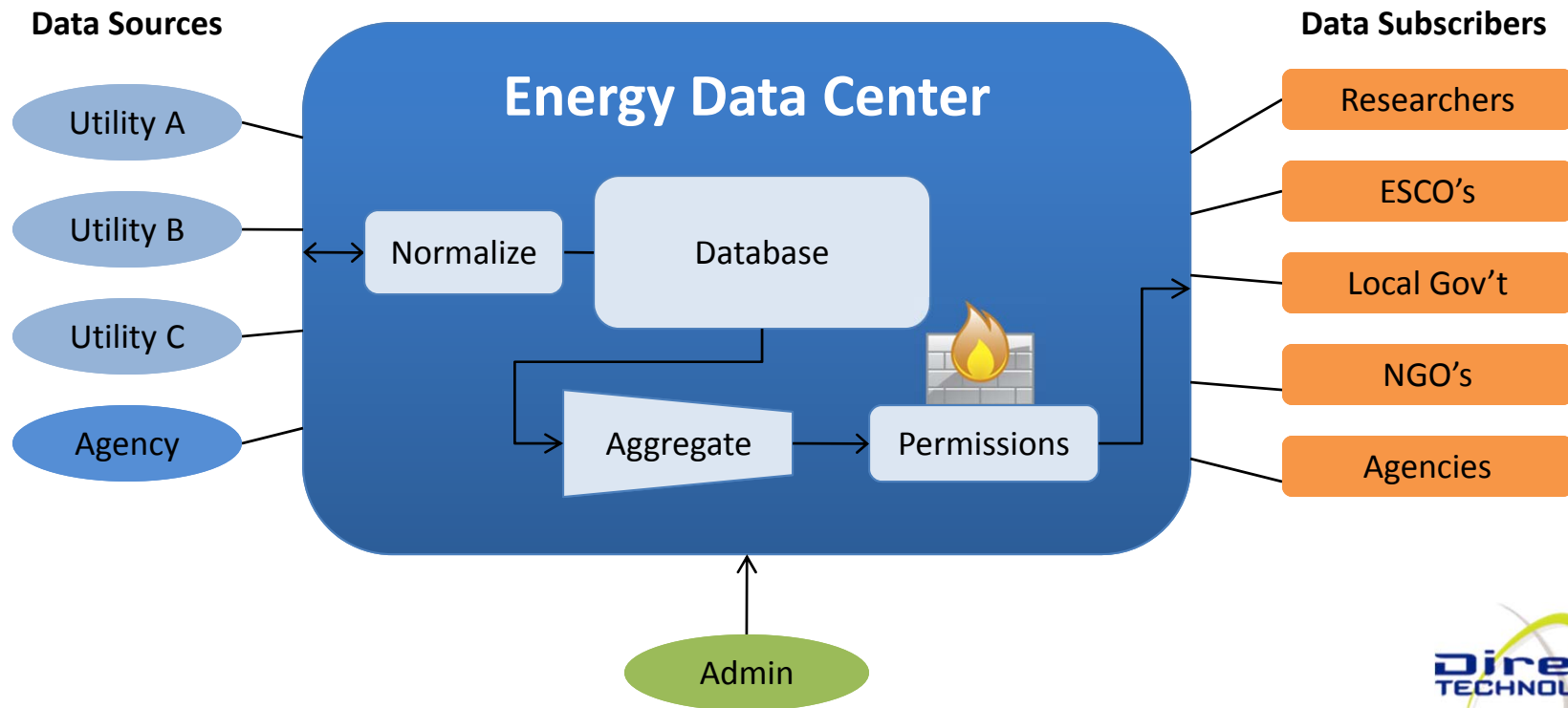Report leveraged enrollments more accurately (even for historical enrollments)

Avoid paying for the measures that have already been paid for by another provider.

Automatically create records in external systems for leveraged enrollments

What might an Energy Data Center look like?

Data Sources

- Utility A
- Utility B
- Utility C
- Agency

Energy Data Center

- Normalize
- Database
- Aggregate
- Permissions

Admin

Data Subscribers

- Researchers
- ESCO's
- Local Gov't
- NGO's
- Agencies

Energy Data Center

Security

- Application: Authentication & Authorization
- Transport: Secure SSL & SFTP
- Physical: Tier 4 Data Center

Privacy

- Abstraction through standard data filtering and policies
- Review aggregation and anonymization rules periodically
- Permission levels based on user type or entity

Discussion

Thank you

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