

Creating a Vision of Integration and Interoperability

Making knowledge available when, how, and
where it is needed

$$K = (I + E) * A$$

Thanks to the Department of Human Services Data Warehouse Team for some of the information in this presentation.



DHS Overview

- Over 4,000 employees
- Aging and Adult Services
- Child and Family Services
- Developmental Center
- Public Guardians
- Juvenile Justice Services
- Licensing
- Substance Abuse and Mental Health
- Disability Services
- Recovery Services
- Services Review
- Utah State Hospital



UDOH

- Disease Control and Prevention
- Family Health & Preparedness
- Health Data and Informatics
- Medicaid

Data Systems

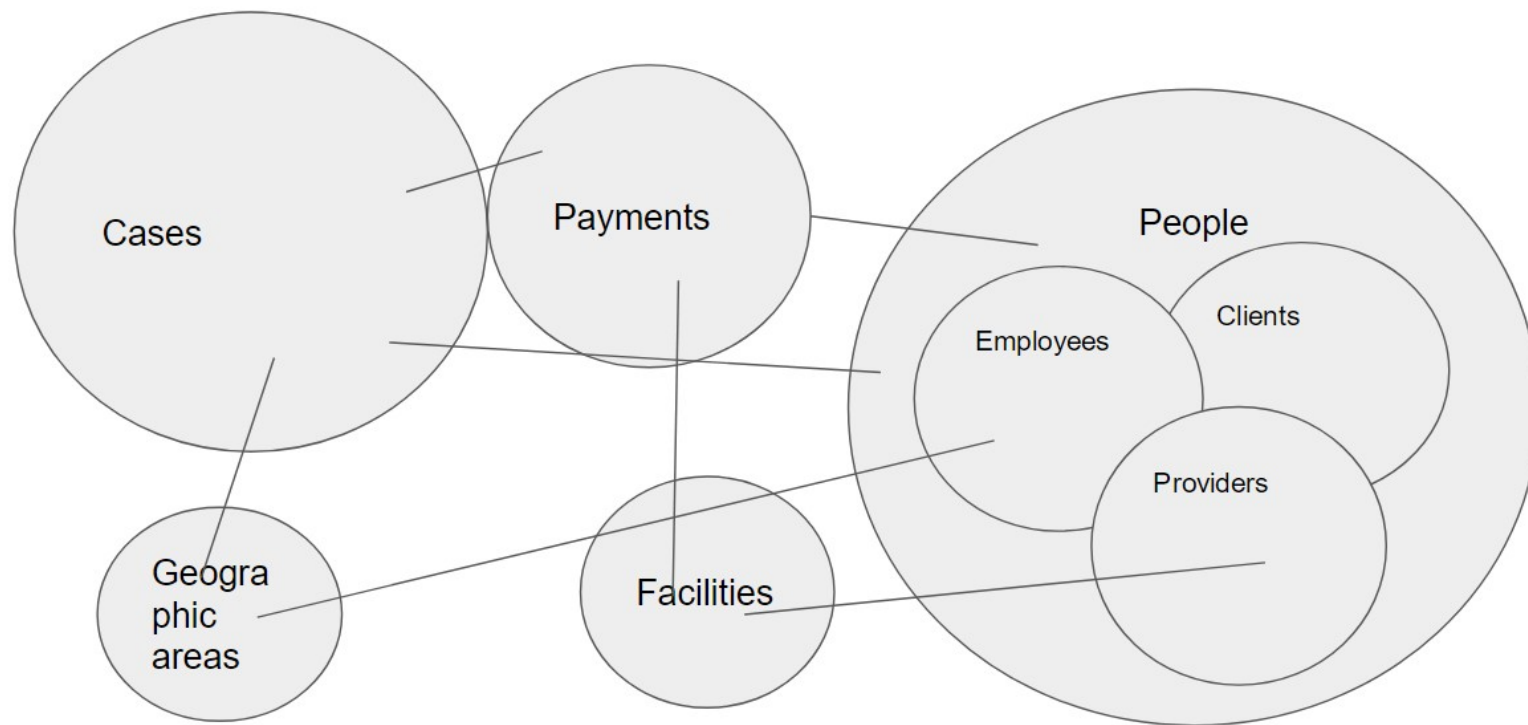
- Typically one main per division
- Sharing of data systems
 - DCFS/DAAS
 - DJJS/Courts
- Philosophy of integration



Data Access

- Division data readily available
- Integrated data from multiple sources readily available
- Department Data

Multiple Modules





Interoperability

- Multiple interfaces
 - With other department agencies
 - With other state agencies
 - With contract agencies
- Type of interfaces
 - Dynamic
 - Data transfer



Data Availability

- Over 1600 tables of information
- Hundreds of reports/queries available with filter options
- Information available to all with some exceptions & tracking built in
- Had to justify doing anything external to the main system.




Business Intelligence

Business Intelligence is about gaining a better understanding of the Information in your organization

Information is the second most important resource of any organization

Information is used to make evidence-based decisions, NOT anecdotal decisions

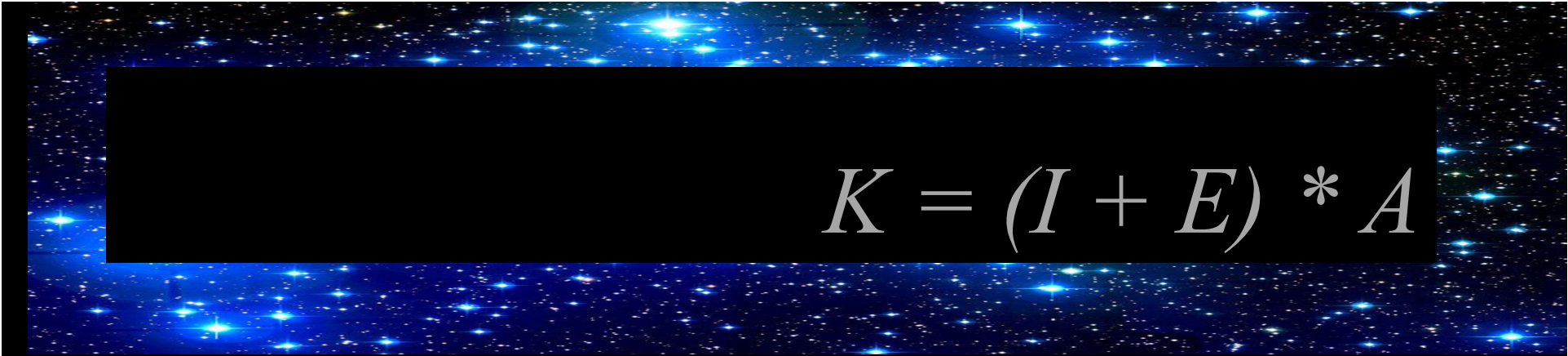


*“Data... information... knowledge.
There is a difference.”*

Data reflects details found throughout an organization

Information is the collection and logical grouping of data

Knowledge is the combination of expertise and access to information


$$K = (I + E) * A$$

Knowledge increases as access to
information increases

K = Knowledge

I = Information

E = Expertise

A = Access



So what is the problem?

Decision makers in the departments do not have easy, timely access to the information they need to make knowledgeable decisions.



But that never happens – NOT!

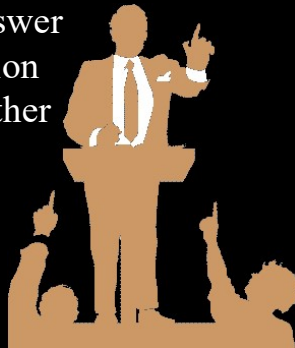
You are sitting in a Legislative cabinet meeting and your Department Director turns to you and asks:

- How many Clients receive _____?
- How much have we spent on _____?
- How many people in Utah are afflicted with _____?

That starts the lengthy data access process

You have a question and call someone for the answer.

BUT the answer to the question spawns another question.

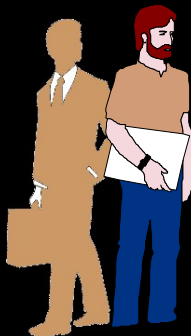


They have you call someone else or they tell you they'll get back to you.



You or they find someone else to help answer the question.

They finally have the answer to your question.



...And so on, until you find the right person(s) to answer the question.



This process has many steps

Ad hoc queries

Downloads

Manual transfer

Loading into an analysis tool

Merging

Cleaning and transforming

Adding calculations



And many associated costs

Takes time

Costs money

Requires a domain expert for each data source

Requires “warm bodies” and coordination

It's repetitious



And no guarantees

Depending on resources and priority, you may not get the data needed before decision time

You may get the wrong answer; there is a potential for inaccuracy and miscommunication each step of the way

The process is not easily repeatable



But what if...

While you were sitting in the cabinet meeting
YOU logged on to your Business Intelligence system
and got the answer you needed



Even better, what if...

Your Department Director came back from a trip to Washington DC and told you they found the information they needed and didn't even need to call you!



*Business Intelligence Tools,
Integration, and Interoperability
Solve Problems*

Can reduce long turn around times for information

Meet user expectations of instant business information
accessible from anywhere

Easy to use (easy enough for a manager to use)



Access to data Improves Processes

- Decisions based on timely and accurate information
- Solving “real” problems
- Proactive planning, not reactive planning
- Better control of operating costs
- Level of service to clients
- Innovation



*Integration, Interoperability, & Tools
Add New Capabilities*

Knowledge Management

Data Mining / Trend Analysis

Organizational Intelligence

Business Performance Management

Dash Boarding / Key Performance Indicators

Integration, Interoperability, & Tools

Enable leaders to identify and track the indicators:

- Identify “Value Drivers” that are key to the mission of each department and division
- Enable leadership to manage more effectively and respond to trends more quickly
- Focus attention on the few activities that most effect results
- Improve departmental performance



What about IT?

IT will become a capability provider

IT will empower the business users to get the information they need to make business decisions

IT will teach the business users to fish, instead of fishing for them



Free up Resources

This change will free up resources that were consumed by individual information requests and allow them to be redirected to providing a wider range of information for the business user

Administrative Structure

Centralized  Decentralized



Funding

- Differences in funding sources and the funding flexibility or ability to use for IT systems may influence sustainability and interoperability

Federal Oversight

- DCFS - DHHS
 - Children's Bureau Statewide and Tribal Automated Child Welfare Information Systems 1993
 - New Comprehensive Child Welfare Information Systems
- UDOH- DHHS
 - Interoperability encouragement & grants

DTS Structure

- DHS
 - Department Contact
 - On site development teams
 - Centralized IT and analysts in Division
 - Wish for Department wide data
- UDOH
 - Department contact
 - Development more dispersed
 - More Program Level focus

Efficiency and Outcome Focused Mindset

- System integration & automation where it improves efficiency
- Increased access to data to improve outcomes to the clients/population
- Benefits to
Division/Department/Clients/Population



Benefits

- Code sharing
- Resource Sharing
- Cost sharing
- Reduction of duplication of effort
- Time savings
- Sustainability

Interoperability & Data Sharing

- What data do I need to combine to gain knowledge into my programs?
- Is data sharing prohibited?
 - Laws governing data
 - Data sharing agreements
- Mechanisms for data sharing



Do you know....

- How many information systems are in UDOH?
- What data does UDOH own?
- How you can access the information? And can you access the information?
- Do you have the information you need to inform policy changes, prevention and intervention efforts, and evaluations?
- How many systems do external providers/partners need to access to enter or retrieve information?

UDOH Application

How much time and/or money
has been lost

Shared resources

Duplication reduction

Silo'd thinking

Sustainability



Current UDOH Efforts

- Should current efforts be more broad
- Should they look at utilizing existing resources or resource sharing
- Do people know of the efforts

Utah Health IT Strategic Plan

- Guiding Principles
 - Continue to foster statewide collaboration with all partners
- Goal 3
 - Enhance Utah's Interoperable Health IT Infrastructure



What are your ideas?

- Are your needs currently being met?
- What are your ideas to improve timely and increased data access?
- What are your ideas for resource sharing?
- What are your ideas for strategic collaboration with partners to access data or set up interfaces?