Big Data, Big Challenges, Big Success
Key challenges in big data projects and how States have overcome them

Monty Faidley
Vice President, Product & Analytics
LexisNexis Risk Solutions
Why I Love Big Data

• Big data answers complicated questions
  • How much will spending on preventative care lower healthcare costs?
  • How big of a problem is identify fraud in our State?
  • How many people will be impacted by projected flooding from this hurricane?
  • What is the State’s financial impact from the opioid crisis?
Big Data Success: National Accuracy Clearinghouse

Key Result

Saved $5.6M in year one with projected $200M nationwide
Big Data Challenges: National Accuracy Clearinghouse

**Challenges**

- **Data Silos**: Departments not sharing data internally or between agencies
- **Cooperation**: Limited inter-agency collaboration on projects
- **Perceptions**: Agency belief that data sharing is not allowed
- **Costs**: Who pays for cross-agency system?

**Solutions**

- **Partnership**: New cross-State Disaster Services Work Group
- **Legal**: Inter-agency data sharing agreements
- **Funding**: Received Federal Grant
Big Data Success: Tax Refund Identity Fraud

Made Up Identities
Underused Identities
Stolen Identities

Fraudulent Return
Fraudulent Return
Fraudulent Return

Tax Agency

Key Results
Over 240,000 identities protected; 97% fraud reduction
Big Data Challenges: Tax Refund Identity Fraud

**Challenges**
- **Public Perception:** “Why are you asking for this information?”
- **Privacy:** “Why do I have to take this identity quiz?”
- **Security:** Stringent State & Federal security requirements

**Solutions**
- **Public Relations:** Letters and Communication/PR Campaign
- **Data Retention:** Identify minimum data required
- **Federal Guidelines:** Follow strict rules for data protection
Big Data Success: Unemployment Insurance Fraud

Unemployment Insurance Agency

Monetary Determination for Alice K.

Alice K.

Monetary Determination for Dorice C.

Dorice C.

KnownRisk@yopmail.com

Suspicious Claimants

Maldo@yopmail.com

Nifl@yopmail.com

Suspicious Claimants

Suspicious Claimants
Big Data Success: Unemployment Insurance Fraud

Key Result

Multi-state fraud ring discovered and passed to FBI
Big Data Challenges: Unemployment Insurance Fraud

**Challenges**

- **Human Capacity**: Not possible to research thousands of hits
- **Technical Capacity**: Limited analysis tools and skills
- **Innovation**: State could not believe the numbers were true
- **Publicity**: No one wants to admit they have a problem

**Solutions**

- **Partnership**: Work with private sector to educate and support
- **Data Analytics**: Prioritize from thousands to tens
- **Education**: Present approach and results in layman’s terms
- **Perception**: Celebrate improvement vs. looking backwards
Big Data Solutions for Big Problems: The Opioid Crisis

- Patients
- Doctors
- Addicts
- Drug Dealers
- Pharmacists
- Insurance
- Law Enforcement
- EMS
- Department of Health

A problem of systems - multiple groups share the problem, each one shares a piece of the solution

Big Data solution constrained by data silos, privacy/security concerns, and technical/human capacity limitations
Best Practices for Overcoming Big Data Challenges

**Data Silos**
- Challenge beliefs that data sharing is not allowed
- Use technology to make linking data sets easier
- Encourage coordination between agencies

**Privacy & Security**
- Evaluate why data is collected, how it is used, and how long to retain
- Communicate benefits and trade-offs to impacted constituents
- Follow federal security regulations and private sector best practices

**Technical & Human Capacity**
- Use grant funding and cost savings to make key investments
- Use analytics to streamline and prioritize results
- Partner with private sector to enhance and educate staff
What Can You Do Next?

• Provide leadership and vision – funding/budgets, legislative priorities
• See who is innovating and bring them in to learn more
• Ask your Medicaid Agency: “If you could have one piece of data from any other agency, what would it be? What could you do with it?”
• Recommending big data usage can be a policy in itself
Discussion & Questions

Monty Faidley  
Vice President, Product & Analytics  
LexisNexis Risk Solutions  
monty.faidley@LexisNexisRisk.com

Connect with me on LinkedIn, and Twitter @MontyFaidley