

A large, vibrant sparkler is the central focus of the slide, set against a dark background. The sparks are bright orange and yellow, radiating outwards in all directions, creating a dynamic and energetic visual. The text is overlaid on the left side of the image.

New Wine in New Bottles? The Fermentation of Behavioral Economics in PFM

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Introduction



What's DRM?



What's it got to do with wine?

Overview



Is use of behavioral economics new?



Is big data new?



Where big data breaks out

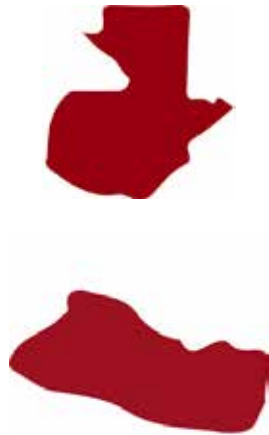
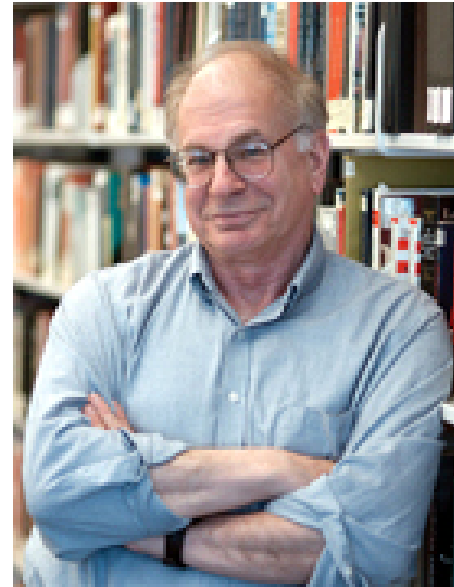


Predictions: where is this taking us?

Is behavioral economics new?



What can we expect from behavioral economics?



Guatemala study

Evidence from El Salvador

Is big data new?



- **Historical example of big data**
 - Computer Assisted Mass Appraisal
- **Exploratory data analysis**



Where big data breaks out: traditional



How big data can strengthen behavioral economics?



Predictive data mining



Could it help in Guatemala?

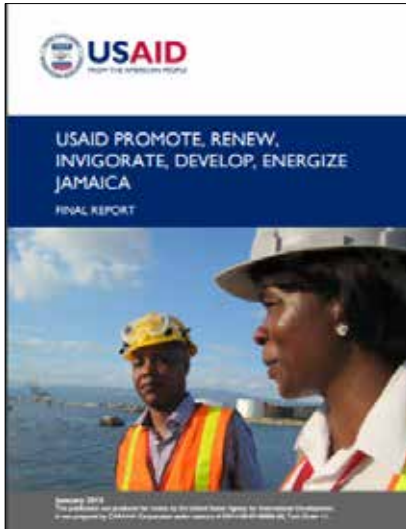


And from there?



The IRS foreshadows the future

Sources of data



Jamaica

- Internal data bases
- Telecommunications data



IRS

- Internal data bases,
- Commercial sources (Facebook, MySpace, YouTube)



IRS uses big data for:

- Charting and analyzing social media
- Targeting audits by matching tax filings to social media or electronic payments
- Tracking individual Internet addresses and emailing patterns
- Sorting data in 32,000 categories of metadata and 1 million unique “attributes”
- Machine learning across “neural” networks
- Statistical and agent-based modeling
- Relationship analysis based on Social Security numbers

Where big data breaks out: fiscal space



Indonesia



Other sources of data:

Mobile devices

Software logs

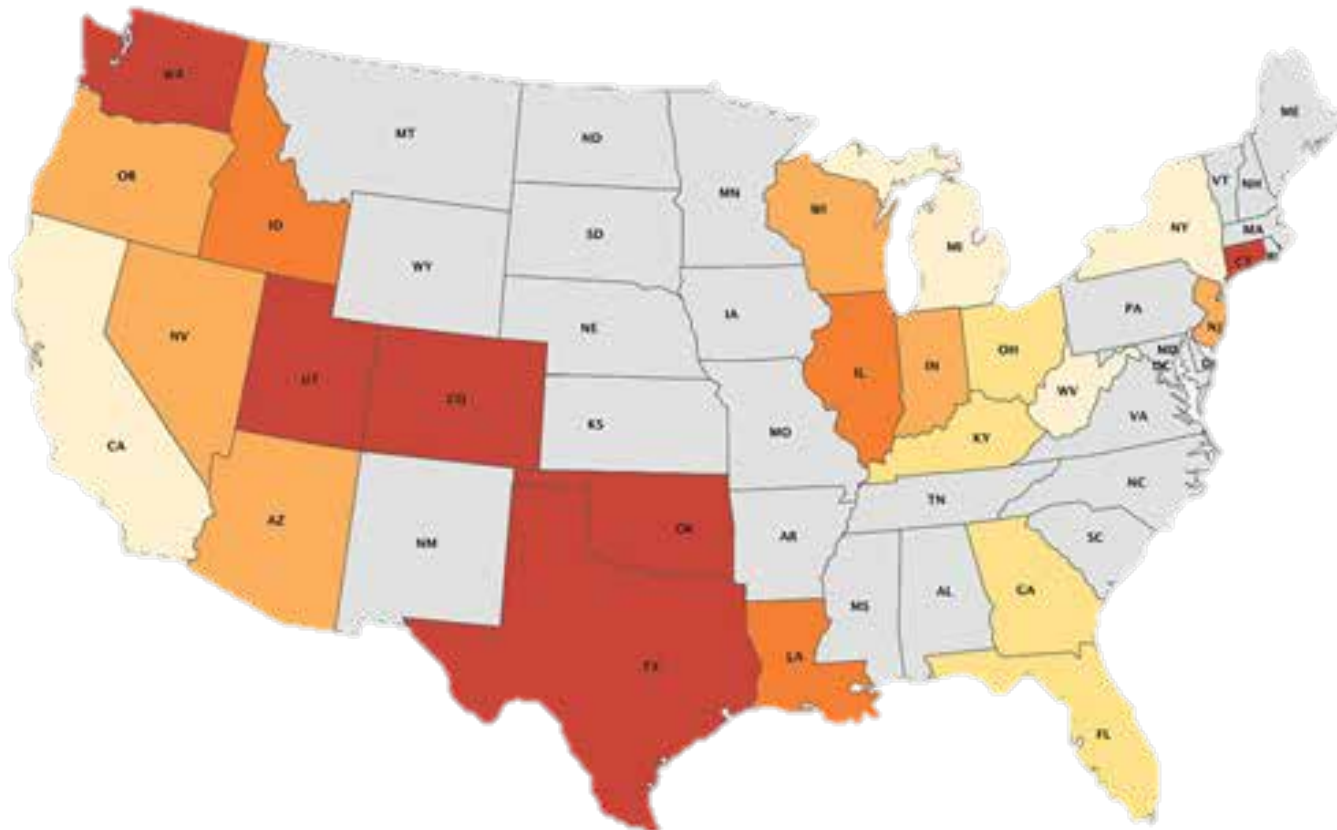
Radio-frequency identification readers, and

Wireless sensor networks

The private sector foreshadows the future



- How the financial industry uses big data



Healthcare Spending		Healthcare Burden			
<input checked="" type="radio"/> State		<input type="radio"/> County		<input type="radio"/> Metro Area	
States with highest and lowest spending level in 2016					
Top 5 States		Average Spending			
	Colorado	\$916			
	Utah	\$900			
	Connecticut	\$880			
	Texas	\$873			
	Oklahoma	\$854			
Bottom 5 States		Average Spending			
	California	\$596			
	Michigan	\$601			
	New York	\$620			
	West Virginia	\$629			
	Kentucky	\$648			

The downside of big data



- Privacy
- Ethical issues



Conclusions



Is behavioral economics new wine? What's the vote?



Big data can inform behavioral economics



And the future is...

Questions?

THANK YOU