

# Global Business Services

## New Trends in Effective Tax Revenue Collection Management

3 November, 2009



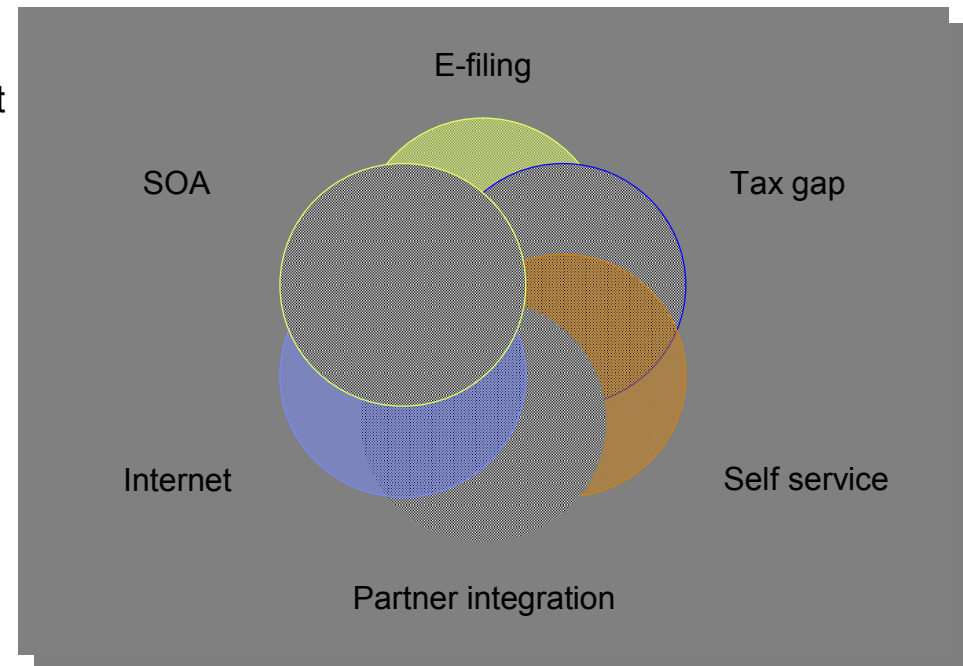
## Agenda

- Overall look at tax administration modernization
- Assessment of the compliance challenge
- Technology tools for tax compliance improvement
- Results



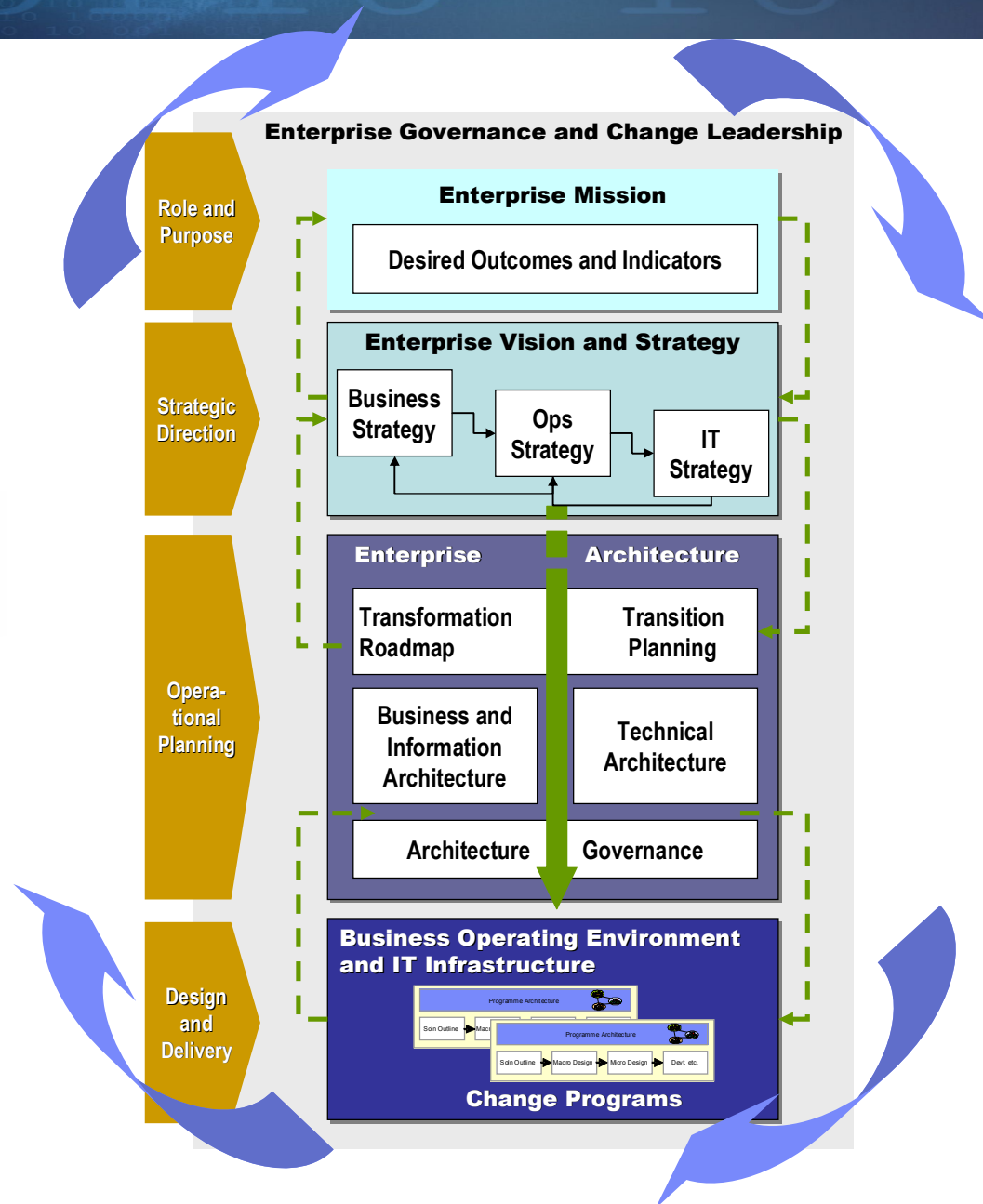
## Key trends in tax administration

- Reducing burden on taxpayers
- Transitioning from a focus on internal processing to "on-line" taxpayer services
- Channel management
- Improving taxpayer services through proactive involvement in customer relationship management
- Continuing concerns over privacy/data security
- Reducing fraud and abuse to improve voluntary compliance
- Closing the gap between owed and collected tax
- Increased use of third party data for compliance purposes
- Increasing trend towards third party intermediation, e.g. including banks, clearing houses, tax agents, etc. in business process
- Exploring new models for combined government tasks, like collection/payment of social, health and other income related benefits/payments



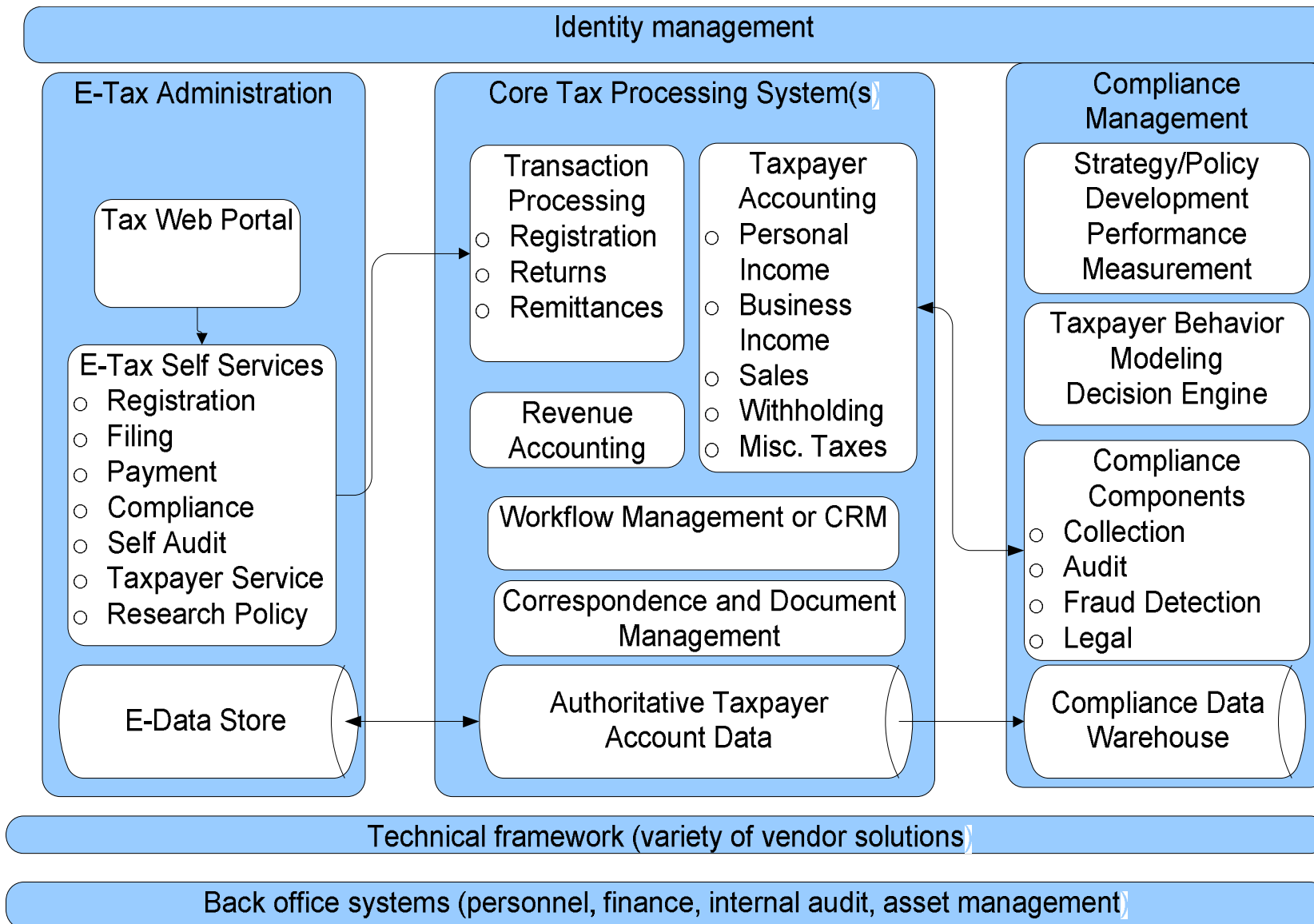


# A framework for modernization





## Reengineered Tax Administration Framework





## Tax Agencies are being challenged to address the tax gap and increase revenues using fewer resources

- **Budget deficits have slowed investment and increased pressure to collect more revenue without raising tax rates**
- **Tax evasion schemes are becoming more sophisticated**
- **On-going tax legislation changes require a flexible environment**
- **Current business practices for tax compliance limit revenue raising capabilities**
- **Skilled resource pools are shrinking, and recruiting new talent is a challenge**





## Identifying suspicious behaviour can be an overwhelming task

- Very large volume of tax filings, often in a short period of time
- Pressure to clear assessments and process refunds quickly
- Fraudsters hide “bad” behaviors amongst the thousands of assessments
- Auditors overburdened with case load
- Dependence on hot tips, hunches
- Recovery of unpaid taxes and excess refunds is expensive and time-consuming





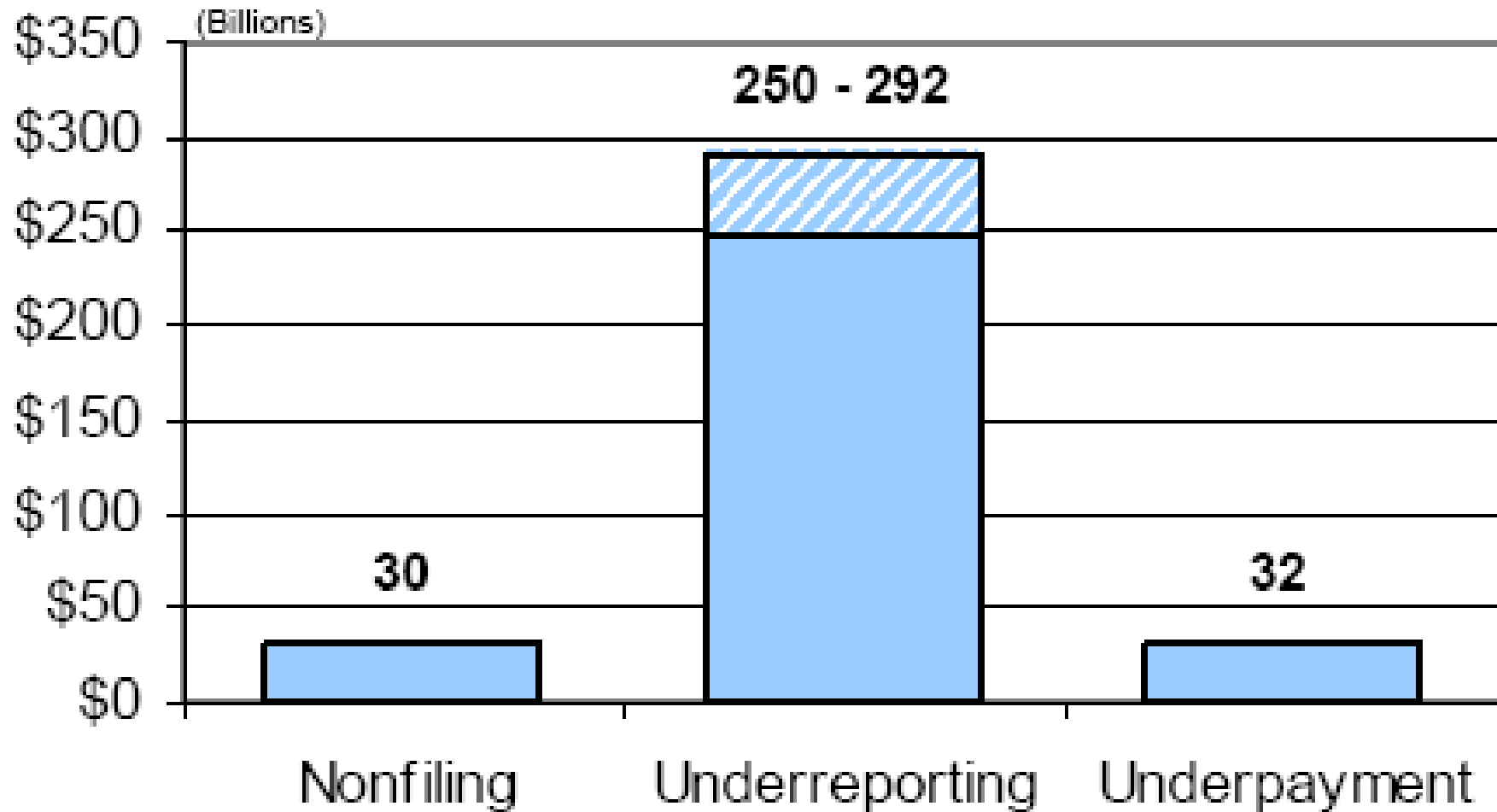
## Agreed upon best practices

- Research capability is critical
  - Understanding what we see
  - Methodology for assessing what we do not see
  
- Taxpayer segmentation
  - Not every taxpayer is the same and cannot be treated the same for service and compliance purposes
  - The right segmentation will vary from country to country
  
- Risk-based compliance strategies
  - Resources never allow tax agencies to chase every compliance issue or non-compliant taxpayer
  - Some compliance cases/issues are more important than others





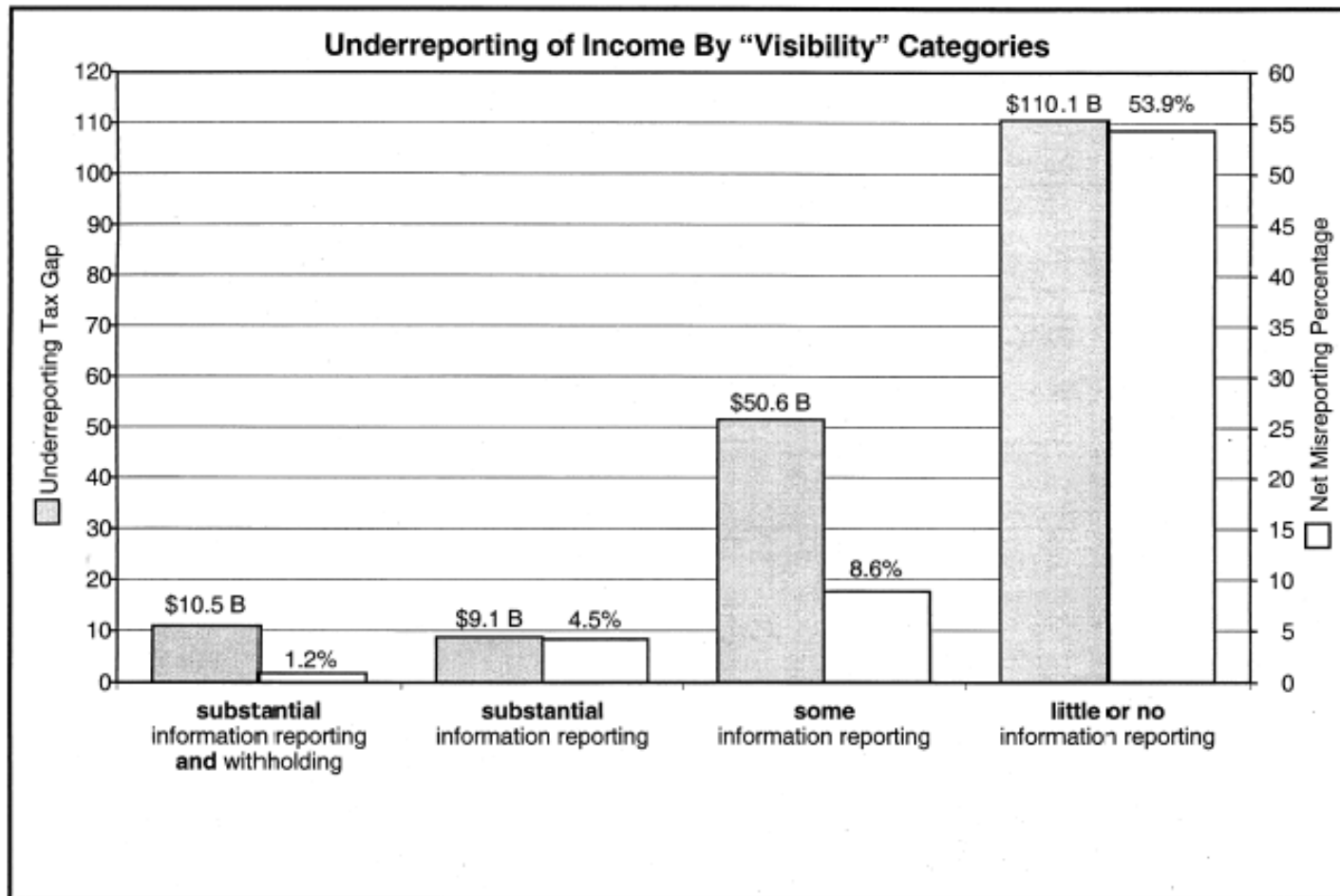
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Individual Income Tax Underreporting Gap

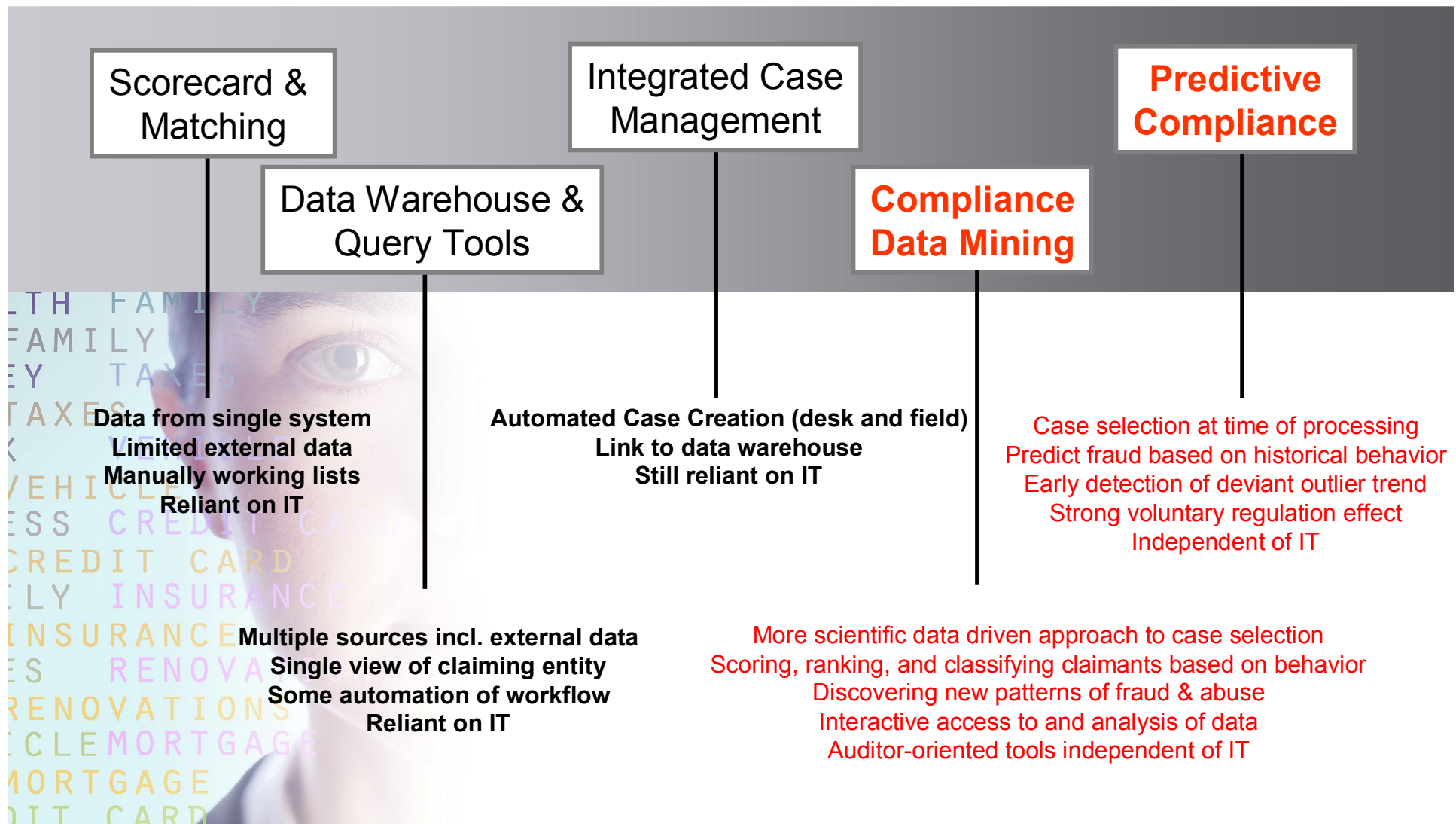


Based on updated estimates derived from the National Research Program underreporting compliance study.  
Source: United States Internal Revenue Service (IRS), National Research Program, May 2003





# Technology is enabling the evolution of increasingly sophisticated methods for managing tax compliance





## Broad range of Business Intelligence capabilities

### Reporting

- Provides full breadth of report types
- Delivers consistent information across all types of report output
- Can be personalized and targeted
- Enables collaboration across users, communities and with IT
- Provides access via email, portal, MS-Office, search and mobile devices etc

### Analysis

- Provides guided exploration across multiple dimensions of information
- Performs complex analysis and scenario modeling easily and quickly
- Gets to the “why” behind trends to reveal symptoms and causes
- Moves from summary level to detail levels of information effortlessly

### Dashboards

- Provides at-a-glance, high impact views of complex information
- Helps quick focus on issues that need attention and action
- Are highly visual and intuitive
- Combines information across disparate sources

### Scorecards

- Provides instant measurement relative to targets and benchmarks
- Aligns decisions and tactics with strategic initiatives
- Supports scorecarding methodologies
- Ensures ownership and accountability

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We now support clients in conducting risk based assessments through behavioral modeling and analytics

## Behavior



**What** is the behavior you are trying to identify?  
What **data** can you use to measure “behavior”?

## Population



**Who** is likely to behave in that manner?  
What **data** can you use to identify “who”?



## Finding the right cases faster increases investigation yield

### Outlier Detection



- Which taxpayers are behaving differently than others (in a suspicious way)?
- How “good” or “bad” is a taxpayer behaving, relative to other taxpayers?
- What is “normal” behavior?

### Data Mining & Segmentation



- What are patterns of non-compliant (and criminal) behavior that I don't know about?
- If I catch a “bad” taxpayer, how can I find out who else is behaving like that?
- Are there groups of taxpayers who behave the same way?

### Predictive Models



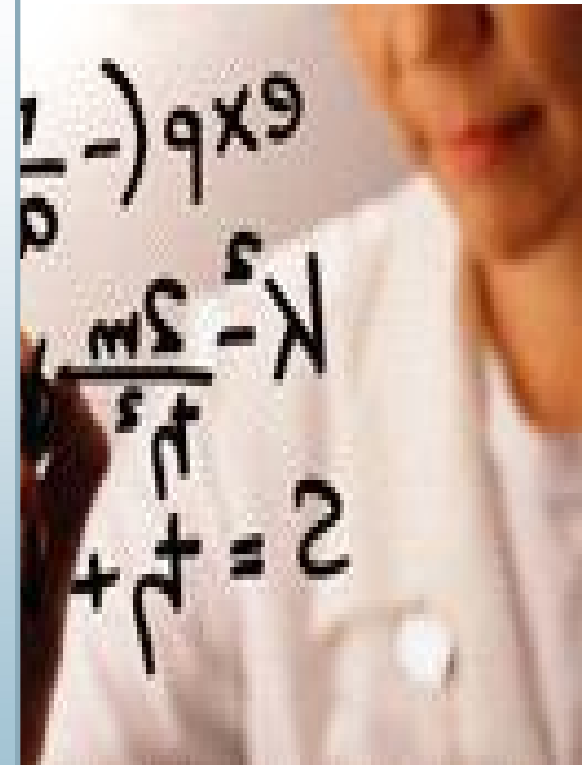
- Which taxpayers are likely to behave “badly” in the future?
- What are the indicators that a taxpayer's behavior is getting “better” over time? “Worse” over time?



We are supporting one client in employing three kinds of analytical methods to answer the key collection questions

## Key Business Questions

- Is the case collectible?
- What action should I use to collect the case?
- When should I take that action?
- Who should take the action?
- How can I optimize revenue given constraints on staffing, budget, and time?





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## Key Business Questions

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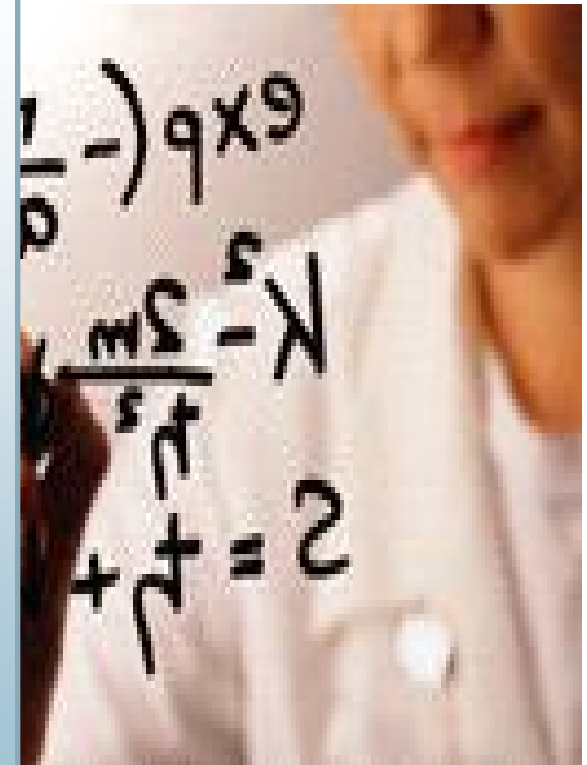
### **ANALYSIS TYPE – Predictive Model**

- What action should I use to collect the case?
- When should I take that action?

### **ANALYSIS TYPE – Markov Decision Process**

- Who should take the action?
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### **ANALYSIS TYPE – Optimization Model**







## Results

- Improved productivity from auditors and collectors
- Increased revenue collections
- Reduced tax gap

### Client Expectations Based Upon Using Solutions

- \$600 million reduction of fraudulent refunds in first 4 years
- Expect to reduce tax gap by 25%
- Expect to collect and additional \$300 million in first 3 years



## Summary

While tax agencies have traditionally had mountains of data, technology can now turn that data into the business intelligence necessary to drive positive changes in not only services, but also key compliance performance measures.



## Contact Information:

Terence (Terry) Lutes

[thlutes@us.ibm.com](mailto:thlutes@us.ibm.com)

+1 (240) 377-1525

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**Thank You**

