



# The impact of emerging disruptive digital technologies on public finance

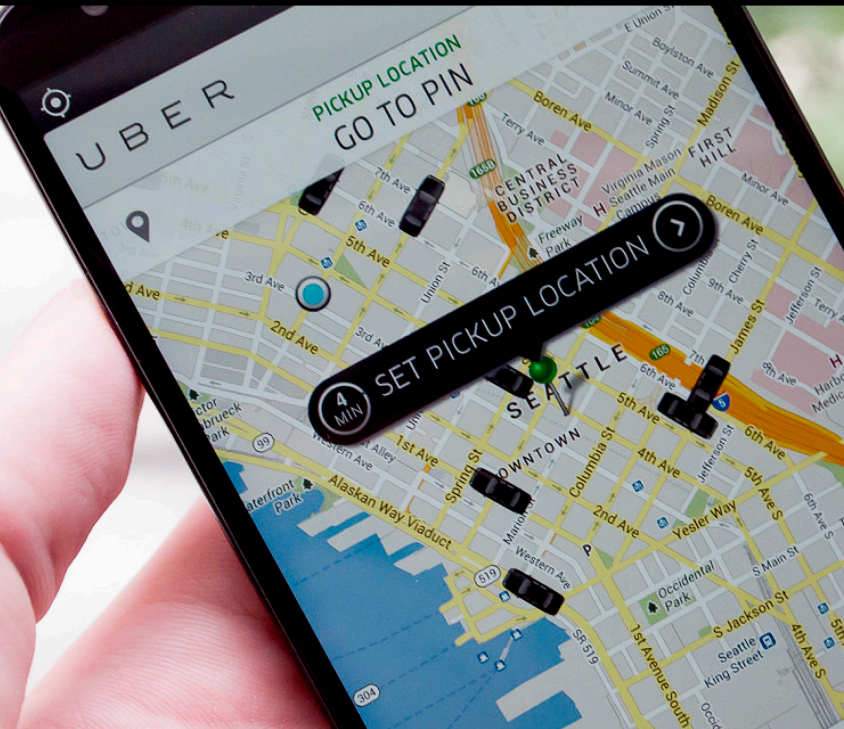
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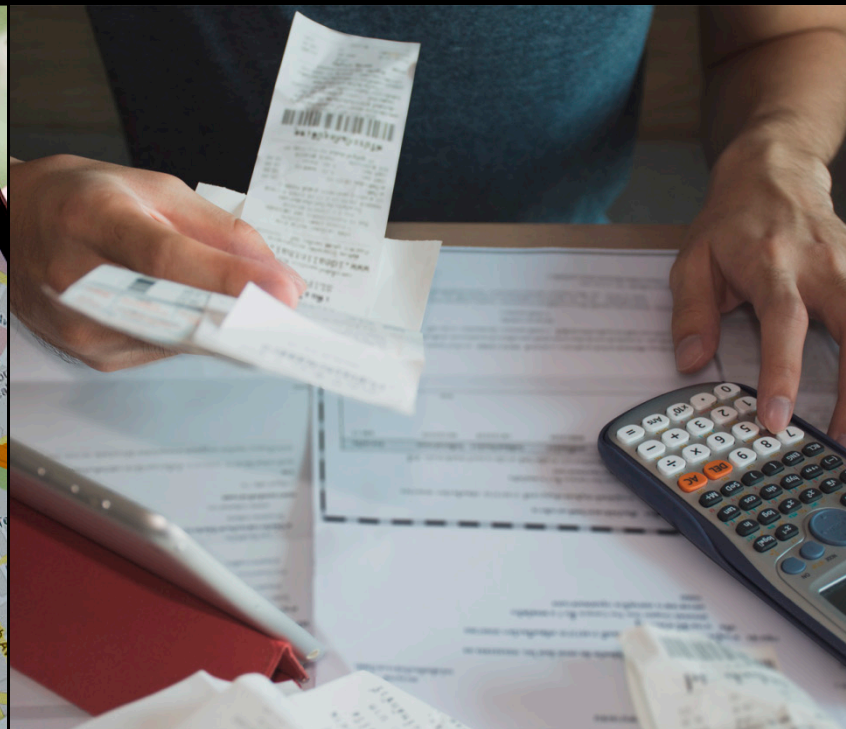
2017 Fiscal Forum  
Digital Revolutions in Public Finance  
IMF Fiscal Affairs Department and Bill & Melinda Gates Foundation  
Washington D.C., April 22–23, 2017

# Digital disruption is reshaping modern transaction systems

Business platforms



Tax collection

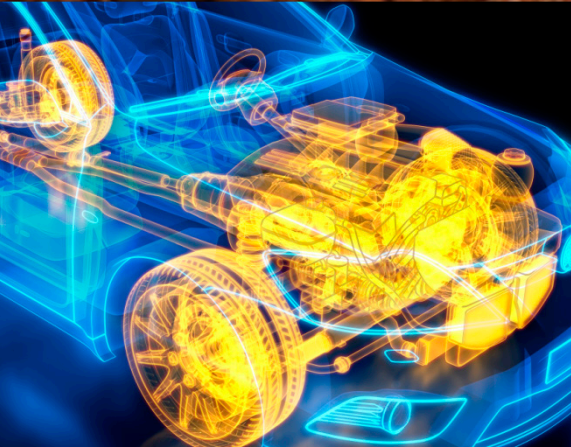


Citizen identity



# Artificial intelligence is transforming industries

IBM Watson to touch more than 1B people by the end of 2017



**Blockchain** will address up to \$300 billion  
in costs associated with each of these areas



### **Logistics**

Reduced cost  
Improved efficiency  
Real-time visibility



### **Property Records**

Lower transfer fees  
Less fraud  
Fewer disputes

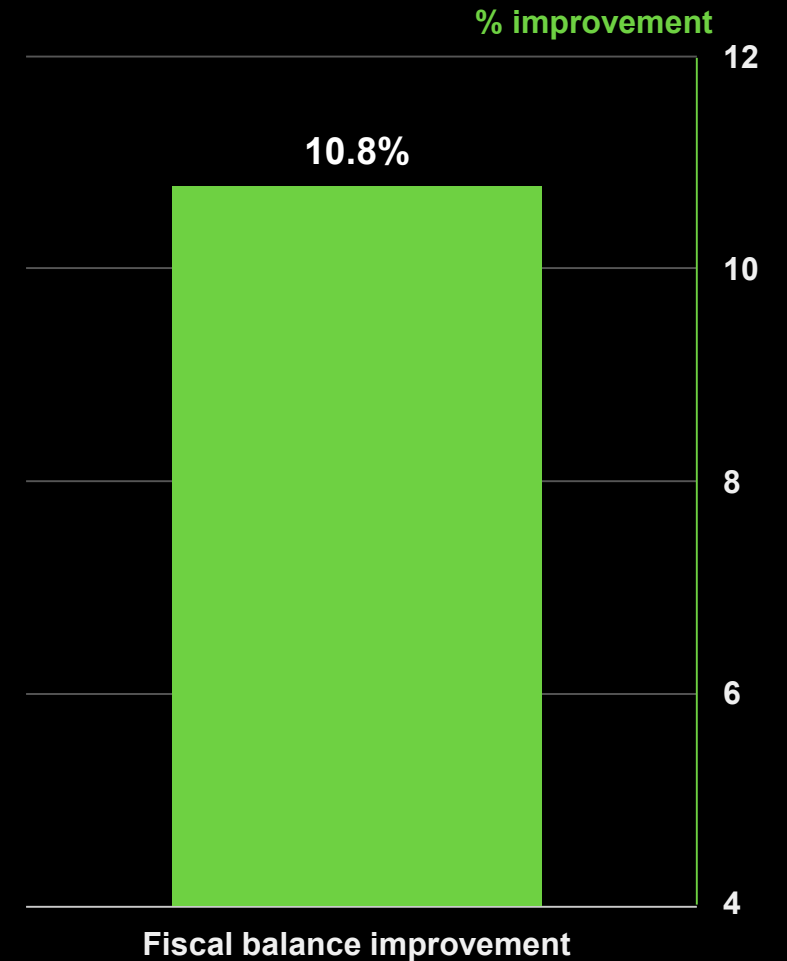
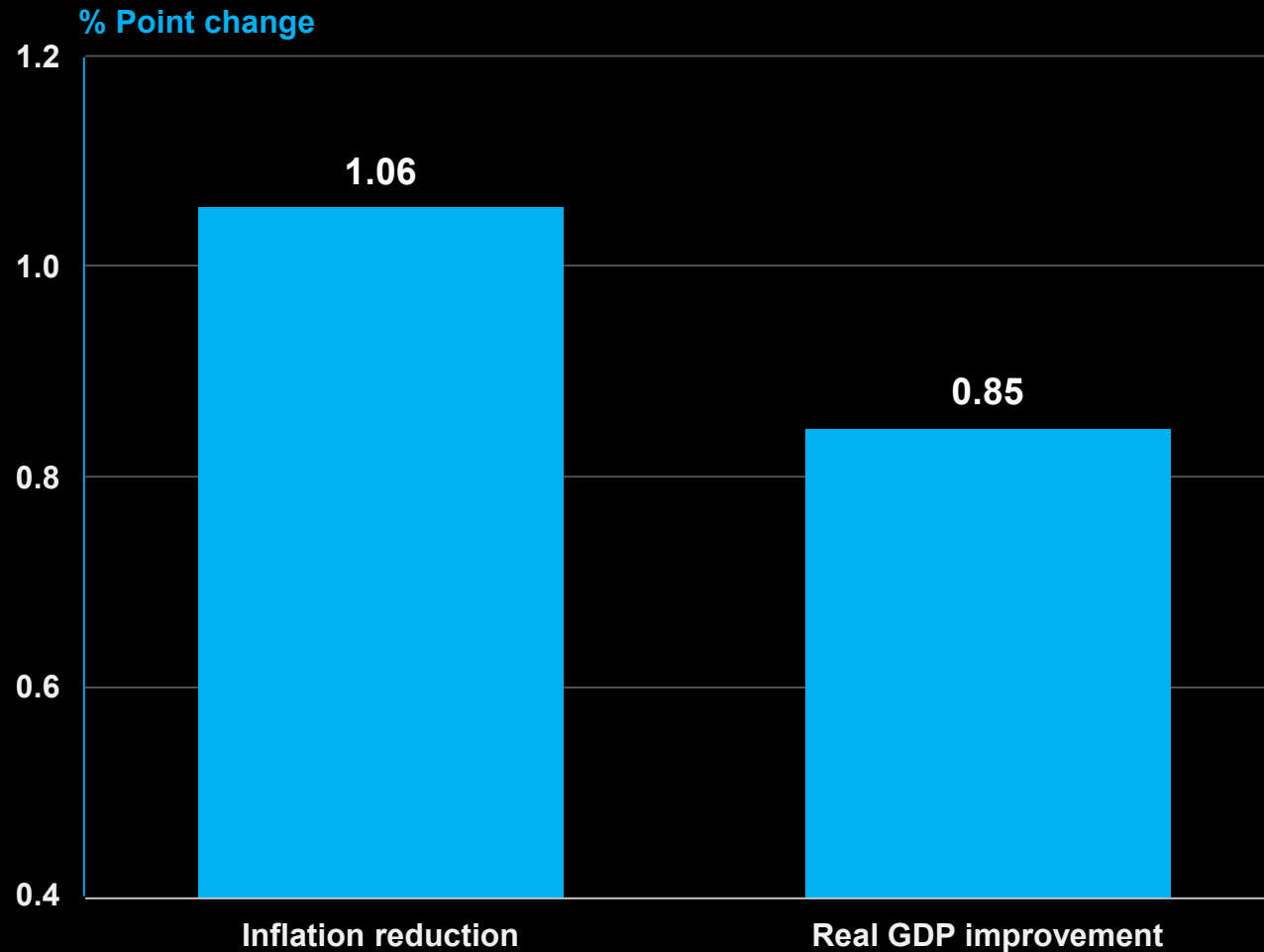


### **Currency and Payments**

Removes intermediaries  
Simplifies counterparty connections  
Records data securely

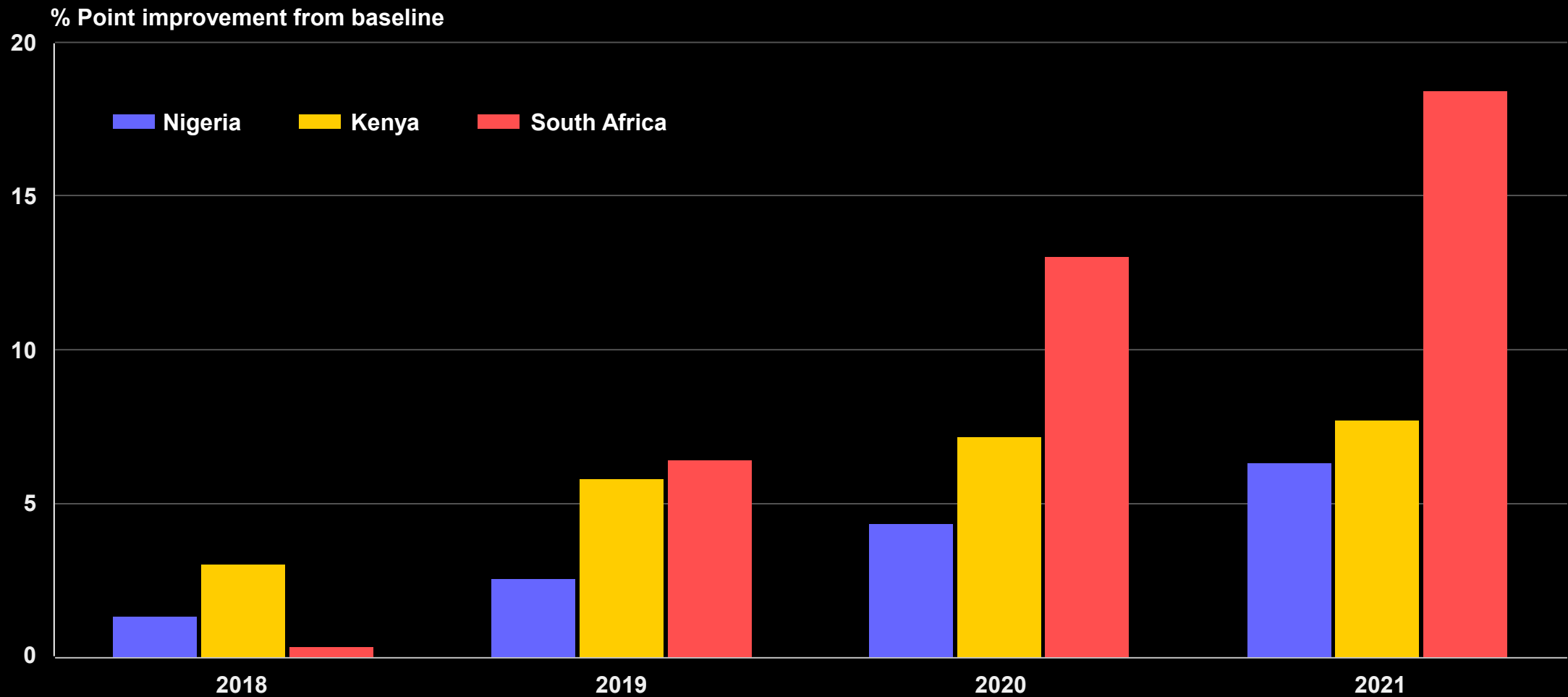
# Blockchain scenario: Economic benefits

*4 year average of Kenya, Nigeria, and South Africa*



# Change in government deficit

4 years: Kenya, Nigeria, and South Africa



# Recommendations

Governments must:

- Standardize data models
- Standardize process models
- Invest in human skill development
- Engage in agile experimentation

IBM