

Economic Vitality - Prosperity and Public Engagement In a Data Driven World

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The World is Changing...



From 1/2 to 2/3

The world's population living in cities today and in 2050 ¹

2.2% versus 4.9%

2015 GDP growth in mature economies versus GDP growth in emerging economies ²



40 million

The global shortage in the number of tertiary educated workers by 2020 ³

Up to 55%

The range of reported rates of youth unemployment around the world ⁴



200 per person

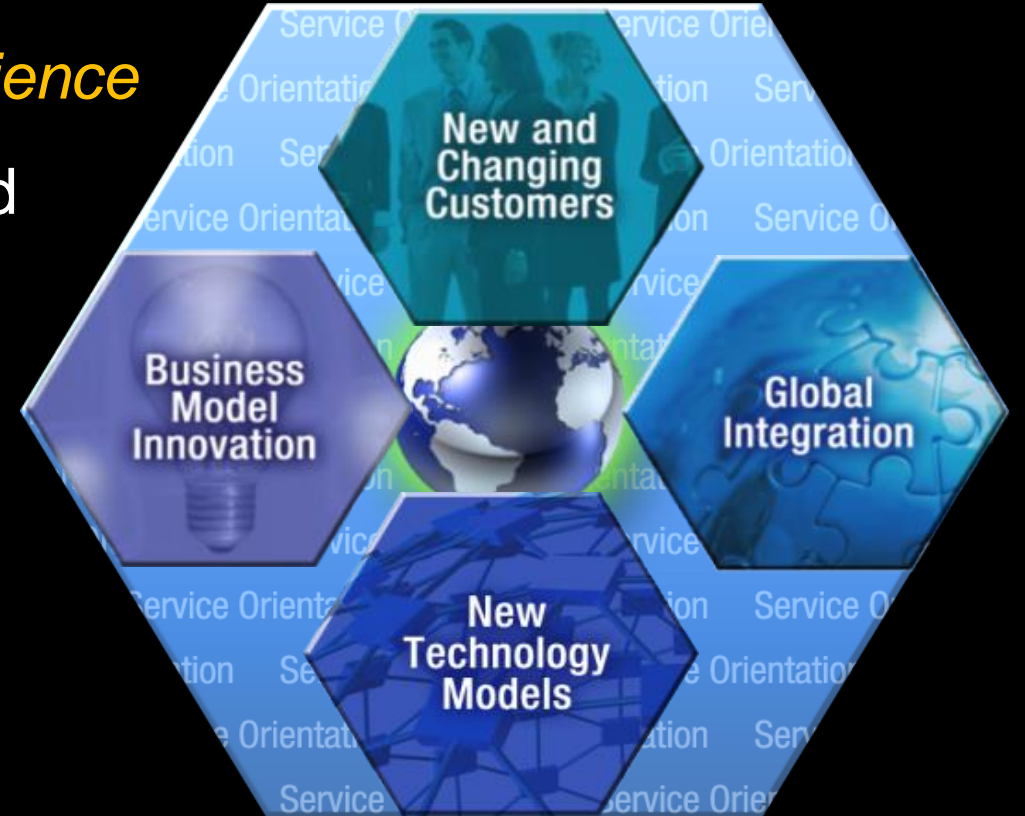
The estimated number of connectable devices in the world today ⁵

20 Quintillion bytes

The volume of data produced globally *each day, every day* ⁶

The **Rate** and **Pace** of **Change** is Rapidly Accelerating for all **Governments**

- Citizens are redefining the rules of the game
 - **Citizens are expecting a *Consumer Experience***
- Tax and spend models are becoming more and more unsustainable
- Improved information sharing is required
 - **Within government departments**
 - **Across many levels of governments**
 - **Extending to private enterprises**
- Increasing threats on data security, fraud and abuse
 - **Significantly impacting budgets and procedures**

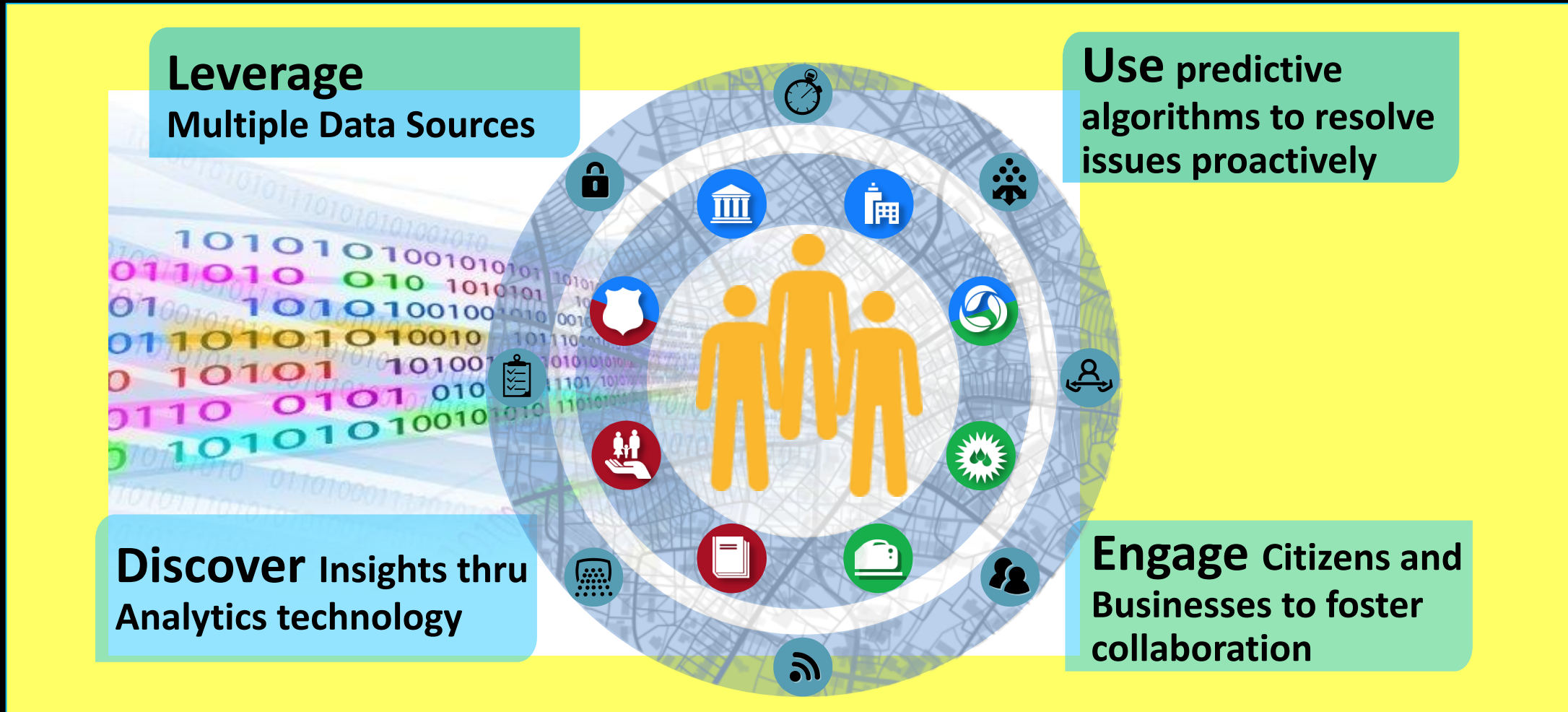


For Governments to deliver upon the **competitive advantages** that **data** can provide, effective leaders will:

- **Drive business outcomes** by applying more sophisticated analytics across more disparate data sources in more parts of their organization
- **Capture the time value of data** by developing “speed of insight” and “speed of action” as core differentiators
- **Innovate within their region** by using systems to ingest unstructured data, use reason to create hypotheses, and learn how to change and adapt

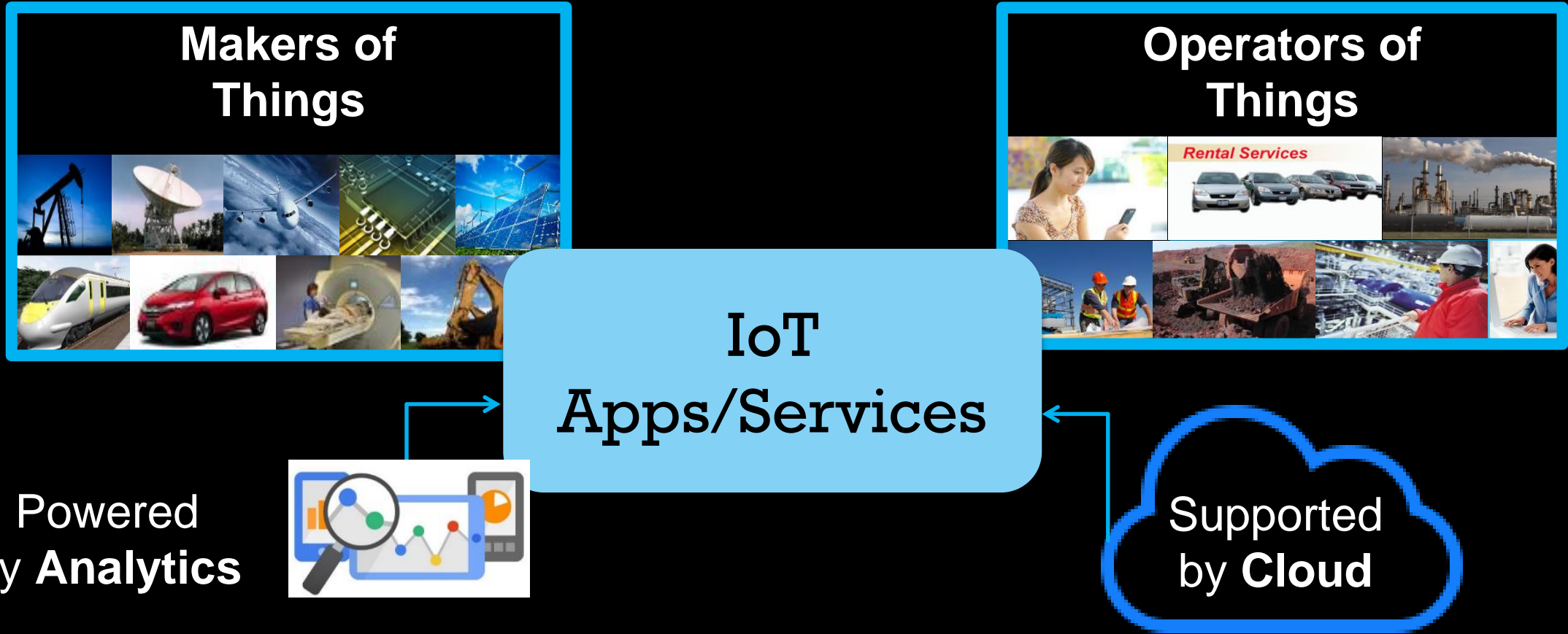


Adapted Government Model



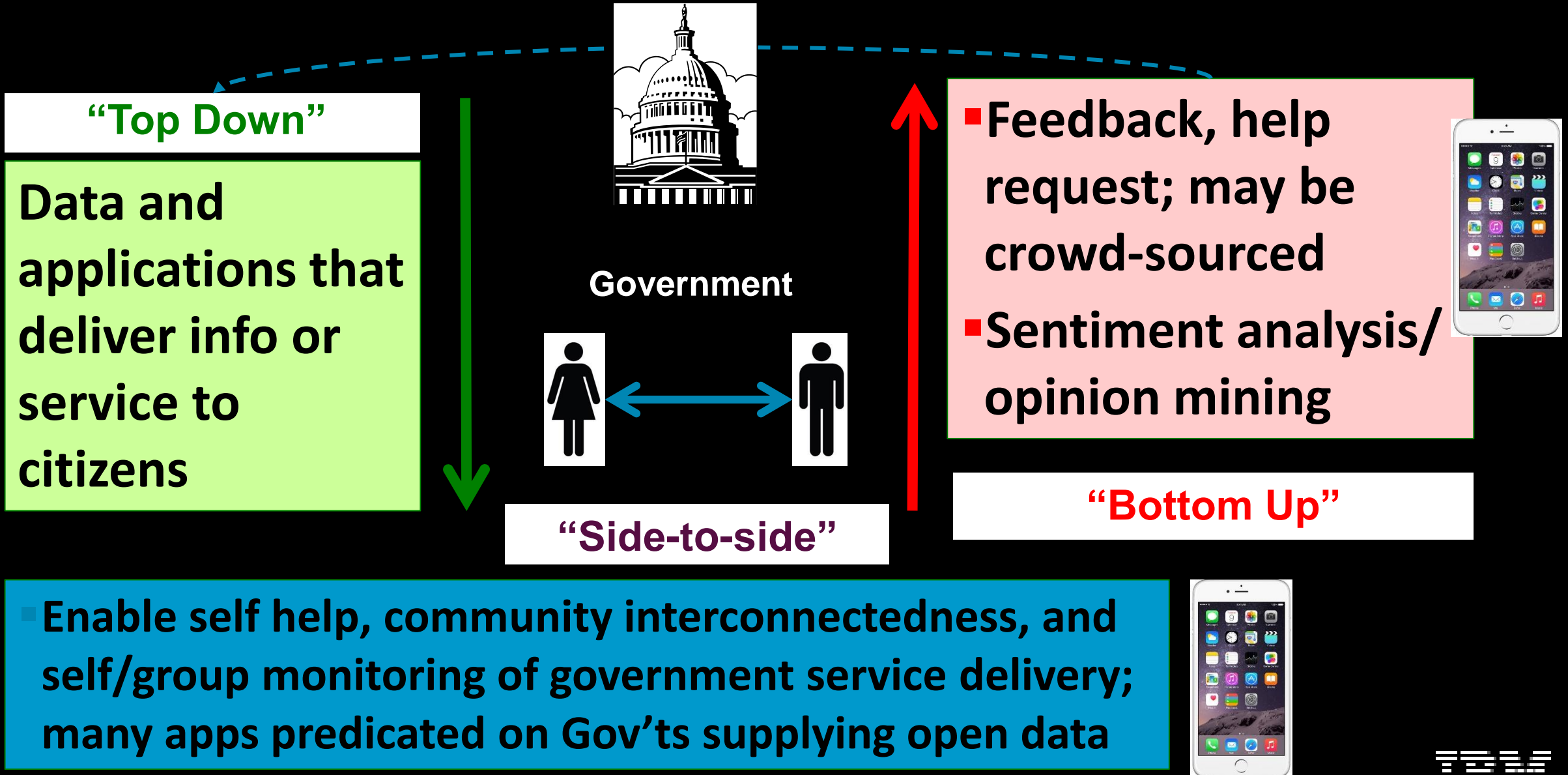
Enables leaders to better serve **citizens and businesses** in a rapidly changing world

Internet Of Things: Value Creation Has Been Led by **Makers** and **Operators**



Prolific amounts of data and new delivery models will allow Governments to engage in **new value creation**

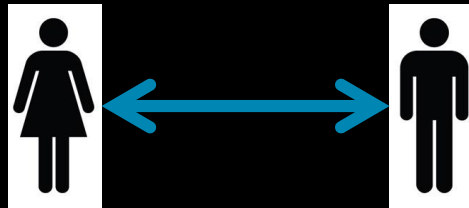
A “U-Shaped Government” is Becoming Essential



“Top Down”

Data and applications that deliver info or service to citizens

Government



“Side-to-side”

- Feedback, help request; may be crowd-sourced
- Sentiment analysis/opinion mining

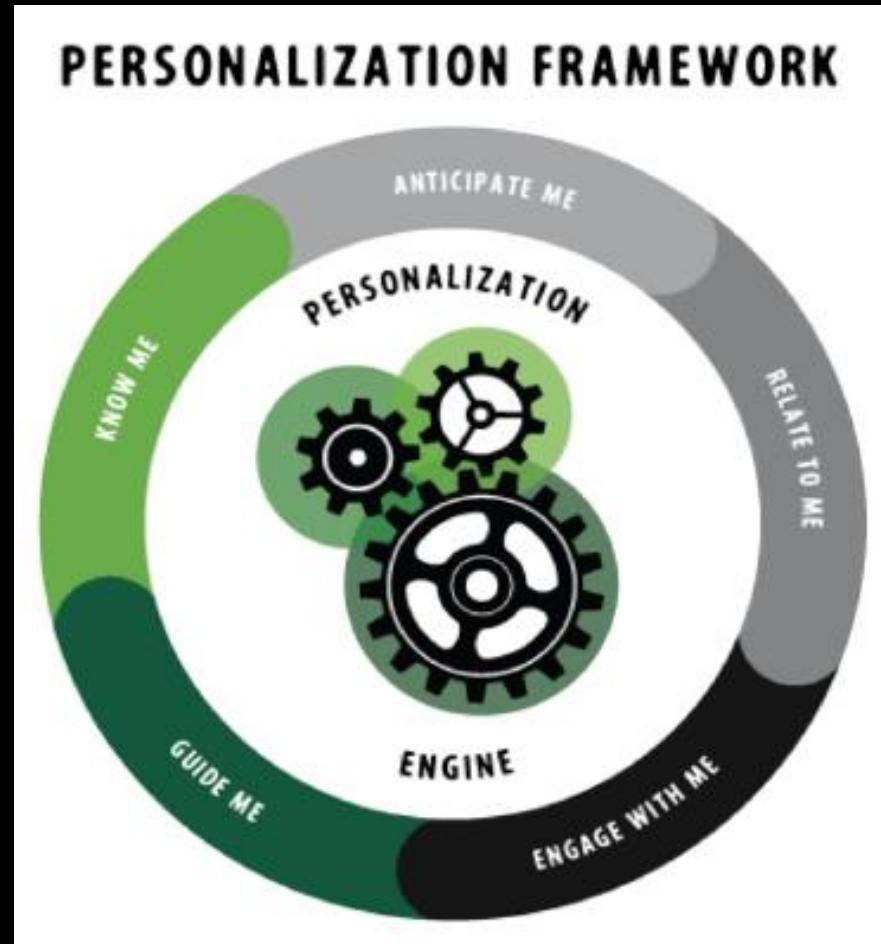
“Bottom Up”

- Enable self help, community interconnectedness, and self/group monitoring of government service delivery; many apps predicated on Gov'ts supplying open data

The Need to Incorporate Personalization

Community Inspired Participation

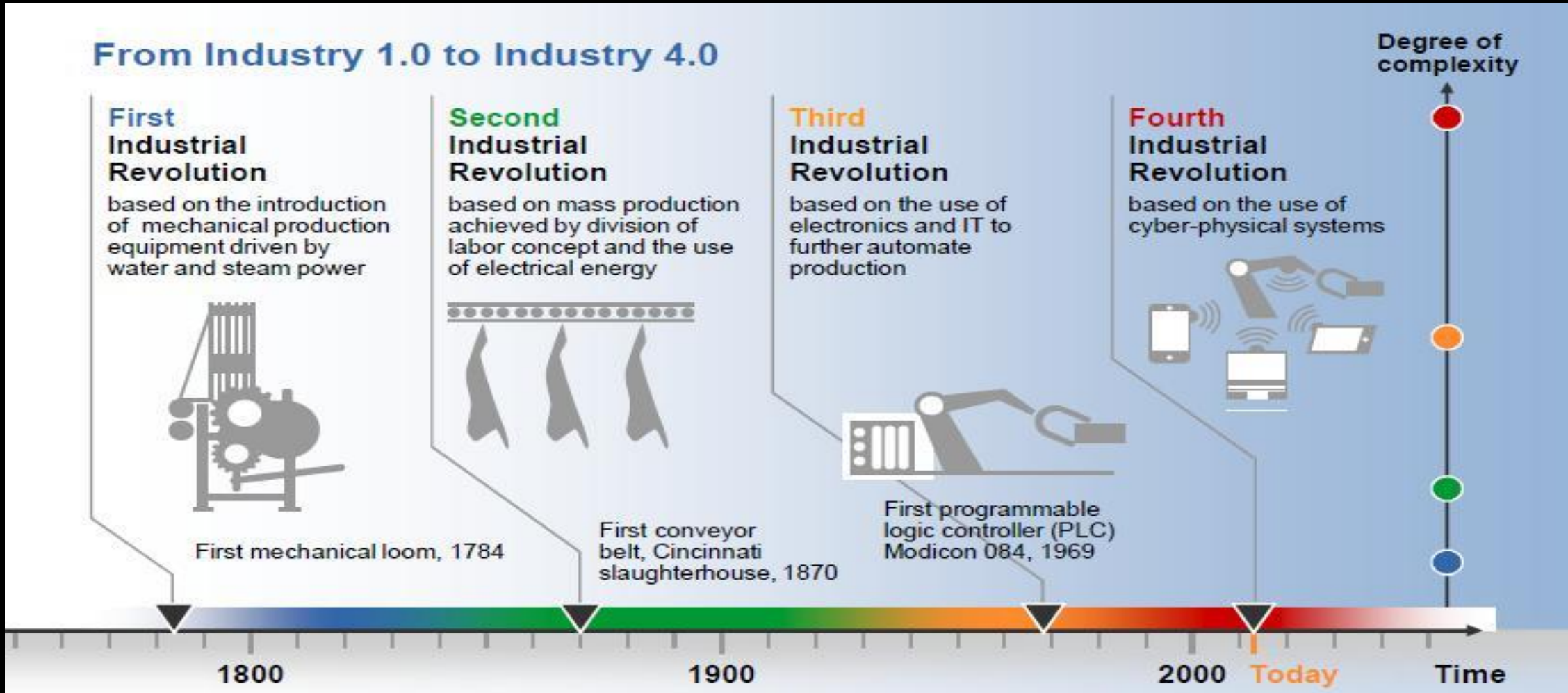
- Citizens – Who am I?
- Places – Where am I?
- Partners – What am I trying to do?



Guiding Principles

- Citizen-Centered
- Collaborative
- Outcome Focused

Economic Vitality in a Data Driven World



Steam-powered mechanical production

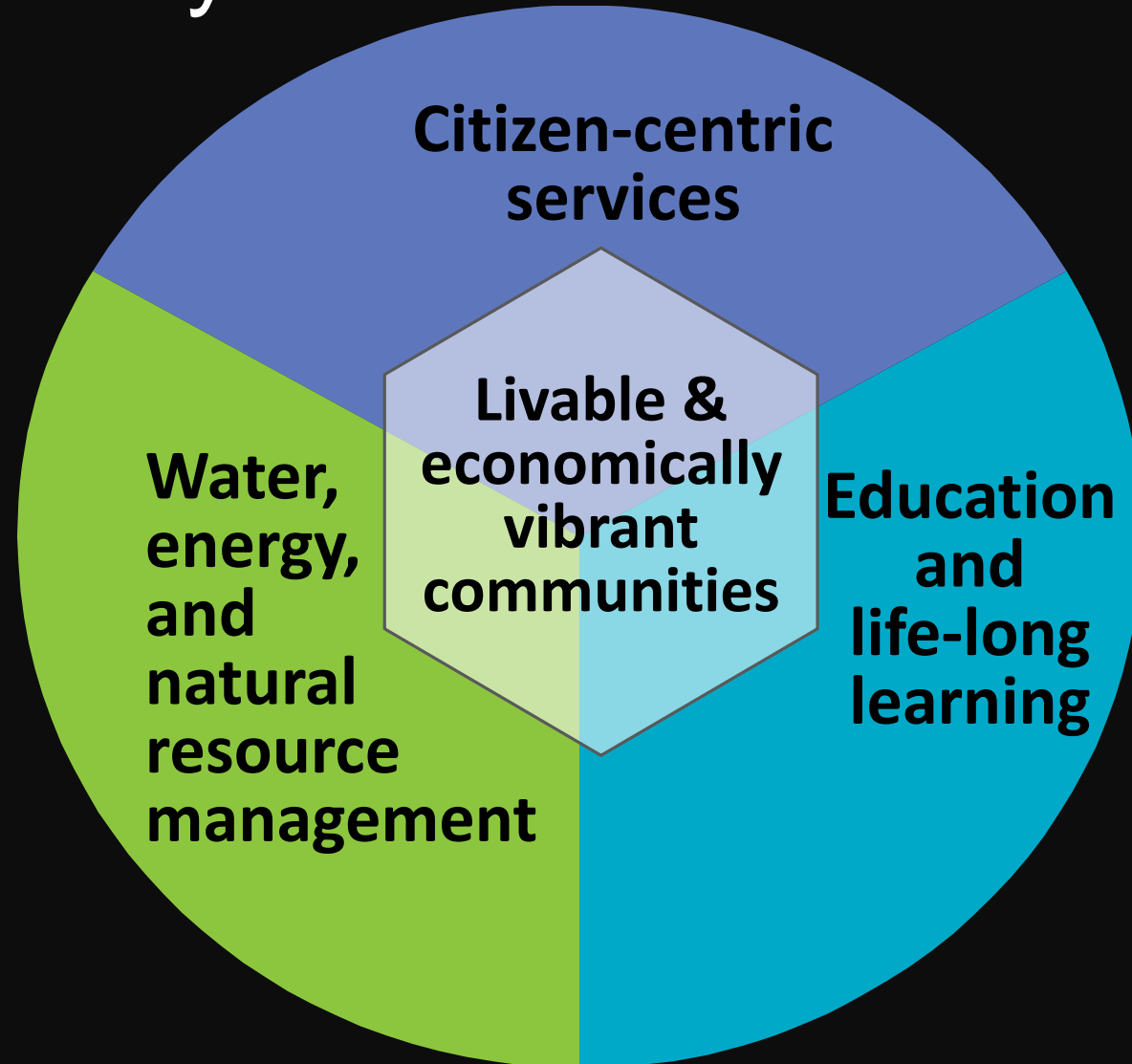
Electric-powered mass production

Technology-driven automated production

Data-powered digital solutions

Improving **Economic Vitality** Requires Government Focus in Key Areas

Governments
lead here



How do our cities,
regions and nations
become magnets for
game-changing,
problem-solving,
job-creating innovation?



“ What mattered over the past 25 years was who could make things the cheapest, but that paradigm is shifting. What is going to matter over the next 25 years is who can make things **the smartest.**”

— Antoine van Agtmael,
The “father” of emerging markets investing



The data-driven economy

Connected and open



Simple and intelligent



Agile and scalable



Innovative and re-imagined



Connected and open

Metropole Nice Cote d'Azure

20% decrease
in traffic congestion by 2020

Improves warning
timeliness for traffic, air quality,
pollution and other problems

Creates flow
of information from the
region to citizens and back

*“The project represents a profound change
for all participants in the area’s economic
system, as we create a sustainable and
interconnected metropolis.”*

—Christian Estrosi, mayor of Nice

Simple and intelligent

A UK University

25% increase

in student retention rates as a result
of close academic monitoring

6 weeks faster

prediction of student struggles,
enabling timely intervention

Fosters success

by matching pedagogical practice
to student learning styles

Agile and scalable

*An autonomous government
agency in Africa*

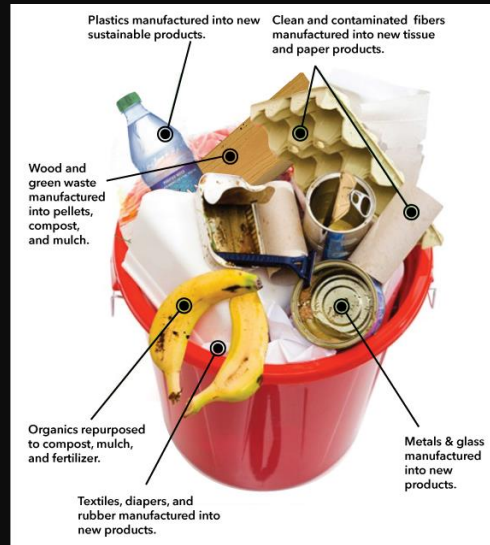
Nearly 100%
improvement expected
in accuracy of shipment data

>90% faster
receipt of inventory data, from
months to near-real time

50% reduction
in time required to dispatch
and receive shipments



A one-bin collection, separation and manufacturing system that enables city governments, corporations and citizens to repurpose 75-100% of their local waste.



Innovative and Re-Imagined Smarter Waste Management

Virtually Zero Waste
Treat all materials as resources

Privately Funded
Economically profitable plant entirely funded via private investment funds

Create Jobs and Skills
EcoHub plant creates 750 to 1,000 jobs with ongoing economic development



“Productivity isn’t everything, but in the long-run it is almost everything”

- Paul Krugman, economist



Globally, economies are weak

Growth requires:
Increased **efficiencies**
Sustained **innovation**
Improved **productivity**



Leaders must deliver

better **education** outcomes,
improved **health**, more efficient
infrastructure systems, cleaner
environments, safer and more inclusive
societies



Attracting businesses and talent

fuels sustainable growth with:
Financial benefits
Social benefits
Economic benefits



Thank You