MINISTRY OF DIGITAL TRANSFORMATION

TOWARDS OUR DIGITAL FUTURE

Presentation of Unmanned Aerial Vehicle (UAV) to Tobago Emergency Management Authority (TEMA)

An Initiative of the Strengthened Information Management Project

Presented by Senator the Honourable Hassel Bacchus,
Minister of Digital Transformation
May 13, 2022

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The Truth about Technology

In this news clip, we see Professor Christopher Heckscher studying the migratory patterns of a small bird species called veeries. The Professor made an astounding finding.

The birds' flying patterns across vast areas , seemingly, are based on their advance knowledge of the severity of the weather they will have to fly through. Veeries' weather forecasts are right 80% of the time (over a 20 year study).

Can birds predict the weather?
Pix11 News – via YouTube
2020

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The Truth about Technology

- Can we say that birds use technology? They have the ability to collect data and analyse it.

- **Input** - their ability to map areas, read atmospheric and climate info. etc

  → Then they transmit information to each other, etc. →

- **Output** - data that alerts them to changes.

- They display the ability to recognise the value of data, and derive from it to be able to mitigate for disaster and preserve their life
- The value of data is not in the data itself. **It is how WE use it**. Technology is merely the mechanism, but when, how and why we use it is what makes a difference.

The Value of Data – Saving Lives

Part I

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Getting it Right

The Digital Transformation Equation:

10% technology

+

90% people.

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Core Values

CAPACITY DEVELOPMENT

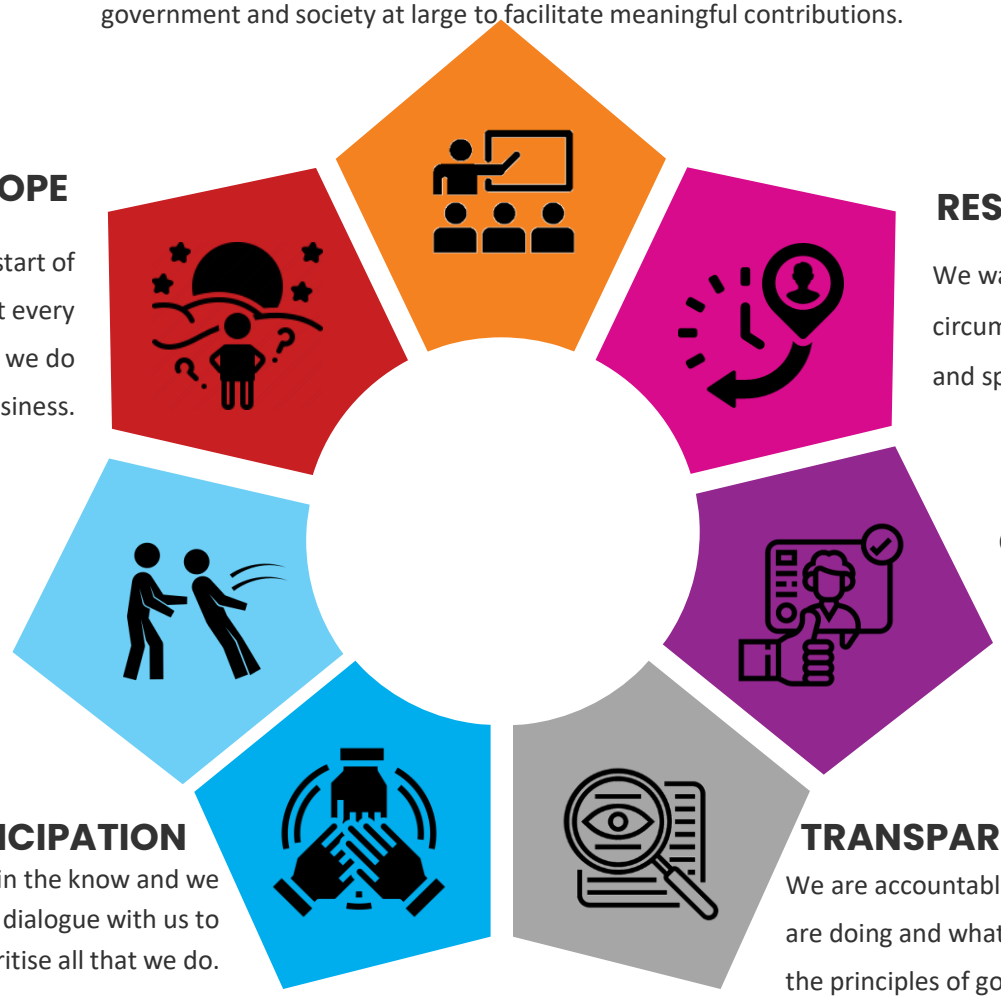
We want to have the right skills, abilities and competences within government and society at large to facilitate meaningful contributions.

HOPE

We want to instil hope that this is the start of something sustainable that will benefit every citizen and will revolutionise the way we do business.

RESPONSIVENESS

We want to be flexible and agile enough to adapt as circumstances change so that we can meet the evolving and specific needs of citizens.



TRUST

We want to demonstrate that our digital infrastructure is secure, robust and will withstand cyber attacks and independent scrutiny. We want our technology to be known for its reliability and availability.

CREDIBILITY

We want to emulate what we preach and lead by action.

PARTICIPATION

We want people to always be in the know and we want people to engage and have dialogue with us to help shape and prioritise all that we do.

TRANSPARENCY

We are accountable to the citizens so they must see all that we are doing and what it means for them and ensure adherence to the principles of governance and integrity.

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The New Way

- ✓A New Way
- ✓End to End
- ✓Delivery of Service
- ✓Appropriate Technology

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When Data Meets Trust

The value of data is not in the data itself. It is how WE use it. Technology is merely the mechanism, but when, how and why we use it is what makes a difference.

We have to trust human capacity and capability to know what to measure, where to gather it, and what to do with that data.

So TEMA, even with the wonderful tool of a UAV, will still have to trust in:

- The expertise and instincts of your team members
- Community values – how Tobago residents respond to disasters
- Your own knowledge of Tobago's geography

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The Value of Data

If the eyes belong to a team of dedicated personnel coordinating emergencies and managing disaster responses on a small island in the Caribbean, then yes, data is incredibly valuable, & life-saving.

What is data?

- It looks different across different organisations, and in different contexts.

How valuable is it? Can it save lives?

- It depends really. The value of data, and its potential usefulness, depends on whose eyes are looking for, and at it.

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A Bird's Eye View

- The UAVs will give you a new way to capture new types of data more easily and efficiently, and the ability to see our world from a different perspective, i.e. a bird's eye view.
- How we use the data will help in disaster management AND disaster recovery.
- UAVs have been used in other small island-states, effectively helping to manage disasters:
  - Dominica
  - St Vincent & the Grenadines

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A new way – Disaster Recovery

- This can aid in disaster response support, public safety and emergency response management in a variety of ways with the following benefits:
  - Provide data in near-real time to inform decisions on the ground
  - Provide data to support situational awareness
  - Operate in dangerous areas so that first responders don't need to be put in harm's way
  - Cover large swathes of area, including remote and hard to access areas, allowing for more efficient use of public safety personnel and resources
  - Provide technical capabilities that humans cannot, such as thermal or infrared scanning

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A New Way – Disaster Management

Going a step further, the collection, analysing and sharing of data will assist in **disaster preparedness and mitigation**.

The UAV allows for:

- Heightened field situational awareness - more accurate reconnaissance and field operations;
- Greater national resilience – providing data for disaster recovery and response systems and improved early warning systems;
- Measuring and detecting patterns - decision-makers can better plan, design, and implement programs to reduce the impacts of natural disasters.

The Value of Data – In Dollars and Cents

Part II

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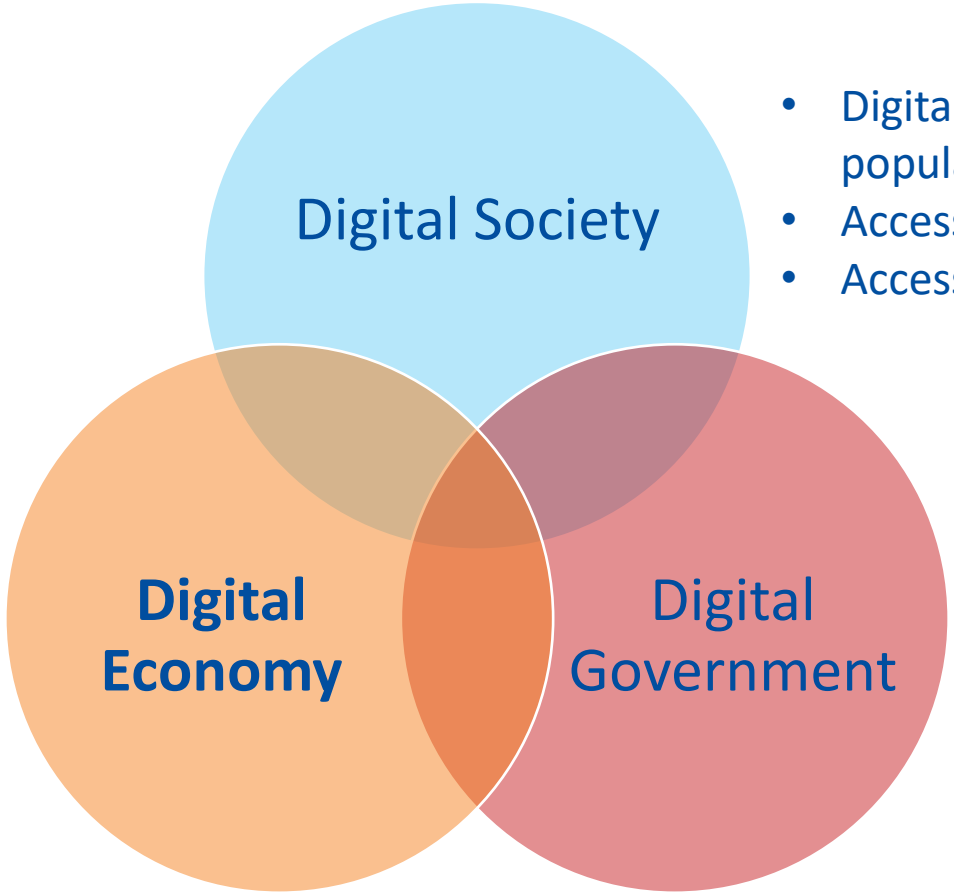
Three Pillars of Service Delivery

- **Developers Hub**
- **Co-development through Partnering**
- **On-line niche market-places**
- **Open data initiatives**
- **Cashless payments**



- Digital literacy of all segments of the population
- Accessible and affordable broadband access
- Access Centres and Free TTWiFi

- Citizen-driven solutions
- E-identity
- Interoperability platform
- Open-source solutions = “Built by T&T, For T&T and the world”
- Government cloud services

“Data is the new oil.”

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A New Resource – Spatial Data Sets

- The increased use of this drone generates enormous opportunities.
- Creating spatial images in data sets that MDT will curate, anonymise, and make accessible to the public
- Our entrepreneurs can then mine these for insights, & develop solutions & applications
- Lays the foundations to innovate and deliver solutions made in T&T, for T&T and the World.

Photo credit: World Bank

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Made by T&T, for T&T & the World

- **Innovative thinking:** What new solution might emerge from right here in Tobago, that will enable us to provide better services, save more lives, & live more sustainably?

- **Informed decision-making:** What cost-saving decisions will we be able to make based on the data you provide?

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Digital Transformation

- Digital Transformation goes beyond digitization and digitalization.
- We are integrating elements of People, Process, and Systems to bring the most value-added for the delivery of services to Citizens.
- The technology & data is there. It is now up to us to use it in meaningful ways, like TEMA will do, to build our digital economy, our digital society, & to save lives.

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Thank You!