Diversification and digitalization give economy a boost

The ambitious island nation is taking advantage of new technology and diversifying its economic portfolio

Long reliant on large and lucrative reserves of oil and natural gas to power steady economic growth and socioeconomic development, the dual-island nation of Trinidad and Tobago is accelerating an economic diversification drive to attract foreign investors and businesses to promising sectors.

Strategically-positioned between two vast consumer markets that offer preferential access to its many goods and services, the republic of 1.4 million people is opening up the economy and exploring investment opportunities in sectors that include high-value manufacturing, logistics and distribution, maritime, tourism, creative industries and financial services, as well as stateof-the-art business process outsourcing (BPO) and call centers. In addition, the administration of President Paula-Mae Weekes has launched a comprehensive digitalization program to help streamline public and private sector entities through rapid access to digital systems and technology.

"Trinidad and Tobago possesses several strategic advantages that will make the many investment opportunities feasible and fruitful for foreign investors from the U.S. and elsewhere," states Paula Gopee-Scoon, Minister of Trade and Industry. "These include low electricity costs, market access to over 1.2 billion people via preferential access through Trinidad and Tobago's regional and international trade agreements, our geographic location as a gateway to the Americas, our large, naturally sheltered deepwater harbor, and also our developed maritime infrastructure and industry support mechanisms to facilitate maritime and other trade."

The government intends to create a more attractive and enabling environment for businesses and investment by implementing measures to increase efficiency and productivity, while also reducing the time and cost of doing business in Trinidad and Tobago. "Our focus is on diversification in the areas of light manufacturing, high value manufacturing, logistics and





Trinidad and Tobago offers foreign investors a wealth of openings





Paula-Mae Weekes President Trinidad and Tobago

Karen Darbasie President, BATT/ Group CEO First Citizens Bank

distribution, maritime, tourism, BPO, financial services and creative industries of film, animation, music and fashion," Minister Gopee-Scoon adds. "We plan to take all these areas across the world and develop them into first class products that can compete internationally in any market space."

While the COVID-19 pandemic has caused widespread short-term damage to many of the world's major economies, Trinidad and Tobago's fiscal performance has been decent given the circumstances. Indeed, the disruption has actually helped many businesses and arms of government

"Expediting our digital agenda was clearly articulated by the government."

Karen Darbasie, President, BATT/Group CEO, First Citizens Bank

adopt better work practices through the introduction of new technology. One of the areas where this trend has been most apparent is the banking and financial services industry. "The new world that we work in requires us to do much more in an electronic, digital remote space, so all of the products and services we were positioning within the infrastructural environment really started to bear fruit," states Karen Darbasie, President of the Bankers Association of Trinidad and Tobago (BATT), a high-profile position she juggles with her role of Group CEO at First Citizens Bank Ltd.

"COVID-19 also increased urgency in the banking sector for our own adoption of digital technology, both for making ourselves more efficient, and for increasing access to alternative channels for clients to transact," she adds. "The government engaged with the private sector, including banks and financial services sector, to come up with a road map of initiatives for dealing with the fallout of COVID-19 and the new realities of the world. Expediting our digital agenda was clearly articulated by the government."

ICT revolution to enhance prospects

Substantial public and private sector spending on telecoms infrastructure means the latest advanced technology is helping the country embrace the Fourth Industrial Revolution

The scale, scope and complexity of the changes required to digitalize Trinidad and Tobago will be unlike anything experienced before, according to the Ministry of Public Administration and Digital Transformation-the government arm spearheading the comprehensive strategy.

In early 2021, the inaugural meeting of the Digital Transformation Advisory Committee was told the country will climb at least one step on the digital transformation ladder in 2021, as part of a technological revolution that will alter the way people live, work, and relate to one another. "This group is united in the view that success will result in improvements in the quality of life and standard of living of an empowered people," says Allyson West, Minister of Public Administration and Digital Transformation.

This exciting new chapter has been made possible by major investment in key infrastructure since the long-awaited liberalization of the telecommunications sector shortly after the turn of the Millennium. Internet and

Driving the digital economy

The leading player in Trinidad and Tobago's telecommunications sector, TSTT plays a vital role in advancing the country's digital ambitions, says acting CEO Lisa Agard: "As the incumbent provider, we are excellently positioned to support all the government's digitalization plans. Our constant investment in state-of-the-art infrastructure is a critical foundation for national development."

Operating a full range of communications services, that infrastructure includes its bmobile division's 4G mobile network that will soon cover 90 percent of the population, an extensive 4G fixed wireless network, a fiber-optic network providing cutting-edge broadband services and a TIA-certified Tier 3 data center that supplies the Eastern Caribbean with a wide range of cloud services. Having established an Innovation Lab with Huawei and the University of the West Indies and introduced 5G to the country, TSTT will continue to offer early access to enabling technologies. "Any investor in the country can be assured that we have the robust and advanced telecommunications systems to allow them to operate seamlessly," Agard asserts. Telecommunications Services

Telecommunications Services of Trinidad and Tobago (TSTT) www.tstt.co.tt



Cynthia Reddock-Downes, CEO of The Telecommunications Authority of Trinidad and Tobago (TATT), is a leading industry figure as her entity's list of responsibilities includes regulating telecommunications and broadcasting sectors, managing spectrum and number resources, and establishing equipment and service quality standards. "A large proportion of what we do is about creating an enabling environment or promoting investment," she says. "Our role is to enable organizations to enter the various markets, compete fairly, provide high quality services, develop and grow."

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Allyson West Minister of Public Administration and Digital Transformation



Cynthia Reddock-Downes CEO, TATT



Lisa Agard Acting CEO, TSTT

ICT infrastructure are critical to national development; you cannot have one without the other," states Lisa Agard, Acting CEO of Telecommunications Services of Trinidad and Tobago (TSTT). "The government has embarked on a very ambitious program to digitize the public sector. It's going to be a tremendous task and as the incumbent telecommunications provider, we are well poised to support the national development goals."



Telecoms industry guardian ensures sector thrives

Cynthia Reddock-Downes, CEO, **Telecommunications Authority** of Trinidad and Tobago (TATT). reveals how the respected entity is helping the teleworking trend take off quickly and smoothly

TATT clearly recognizes the importance of its key role in facilitating investment and further improving the ease of doing business in Trinidad and Tobago via an affordable and reliable communication sector. What concrete measures are you taking in this direction?

A large proportion of our work is about creating an enabling environment or promoting investment. Our regulatory framework has been organized to ensure we have an open market for telecommunications, allowing entry of various organizations to provide telecommunication services: fixed, wireless, internet and broadcast. Our role is to enable organizations to enter the various markets, compete fairly, provide high-quality services, develop and grow.

In Trinidad and Tobago, it's not just national or regional organizations, we also have international organizations that provide facilities. We have a regulatory environment that enables these organizations invest, we have a process-which is fair and transparent-we authorize these organizations to provide services here. We make sure that, as far as possible, we enable fair competition. Disputes that arise are dealt with promptly. Regulation is therefore all about a regulatory framework that enables fair competition, high-quality affordable services and continued investment in Trinidad and Tobago.

The government's quest for the digitalization of the economy goes well beyond the impact and consequences of COVID-19. Has teleworking put extra strain on the networks and the various internet providers?

Internet providers recently told us that between March and October 2020, their traffic increased by over 50 percent year-on-year. Prior to April 2020, operators expected there would be times when there was downtime, signifying people would be at work or children at school, the patterns of usage of the internet were not as they are now, there is a situation of being "always up"; people are always online in huge numbers nowadays.

Thankfully, network operators have been able to handle the additional volume and traffic for several reasons, one of which is TATT moved very quickly to provide additional spectrum so they could provide the services to a larger number of users at the same time.

The two mobile providers received additional spectrum in April 2020 following their requests. TATT provided the additional spectrum free of charge and will continue to do so until the end of 2021. Based on the circumstances at that time, we will decide whether an extension of this period is required.

Certainly, that additional spectrum has really helped mobile network



operators to enable the remote activities that have been taking place in homes and elsewhere. A lot of the "on the go" network traffic has reduced, as well as commercial traffic. So has the traffic that you would have with individuals using their mobile phones in the street or in outdoor areas has reduced, the internet traffic is now at home.

Fixed and mobile internet traffic from residential premises has really increased substantially. In the business environment, it's quite different from before as you would have had persons in the office using the facilities, the facilities are largely residential and indoors now. As such, service providers have made different arrangements to manage the change in traffic patterns. Now, because a large percentage of the working population and students are at home,

"Our regulatory framework enables fair competition, high-quality affordable services and new investment in Trinidad and Tobago." Cynthia Reddock-Downes, CEO, TATT

and as schools and other learning establishments are closed, if a cable breaks during the day, for example, then everybody is impacted, and customers know right away that they have no internet service.

Regarding customer service, providers have received many more calls during recent periods. TATT has been assured that service providers have been able to deal with the additional traffic, because they've ensured that their networks have the required capacity, in part, because of the additional spectrum received.

One of the consequences of the COVID-19 pandemic is many highly qualified professionals are getting used to teleworking and have realized they can work from anywhere in the world. What services can local telecoms operators offer these individuals so that Trinidad and Tobago is recognized as a competitive place to live and work?

We have excellent internet services, since the minimum megabits per second (Mbps) speed in households is now around 5-10 Mbps, which is sufficient to stream videos and games without issues. We can go as high 600 Mbps, depending upon the type of package. This means the internet is faster, more accessible and reliable, and so businesses can continue to operate remotely in a seamless manner.



What we found in terms of our own organization is that employees are able to take part in many more meetings and discussions than if they were in the office, or had to travel to overseas meetings.

Now you find you're doing meetings all day and all evening and have a priority list for the ones you can attend. For businesses, providing employees have the required connectivity, they can access all the various meeting platforms all of which are available right here.

The Chairman of TATT, Gilbert Peterson, has expressed a strong desire to incorporate 5G in your systems and networks. How soon do you think internet and mobile users in Trinidad and Tobago may have access to this state-of-the-art technology, what is the next step for its implementation?

TATT is formulating a 5G framework which is intended for implementation in the next 18-24 months. We must first ensure that the ecosystem is in place including equipment, phones and other facilities which support 5G. We need to make sure that whatever policy we develop and the sort of environment we create, that we evaluate the technology that we're using, especially the benefits of the technology to Trinidad and Tobago and its impact on how companies conduct business here.

We already have organizations operating here that provide 5G services in other parts of the world, so those organizations would also be included in the introduction of 5G technology and systems to Trinidad and Tobago.

What final message would you like to deliver to the readers of Newsweek to encourage them to invest in one of the many flourishing business sectors in Trinidad and Tobago?

They need to know that we are "open for business". Being in Trinidad and Tobago, doing your business, and working remotely or even having a physical footprint, you would not see any differences in terms of your performance, or the ability to get your job done. The environment, however, would be conducive to work and play.

We want to ensure, as far as possible, that what we do makes doing business in Trinidad and Tobago easy. If you come to Trinidad and Tobago with your family you will discover we have excellent schools, universities and facilities. Of course, it's a developing country, but a developing country with a hydrocarbon industry that is more than 100 years old, and a very highly skilled and educated population.

TATT's work serves to strengthen the social. cultural and economic well-being of Trinidad and Tobago



Demand for internet broadband width has increased dramatically due to more **teleworking**



Actions taken by TATT at the start of the pandemic were crucial for better Internet provision



In mid-2021, more than **6,000** households will be surveyed on their use of **telecoms** services



Mobile number portability is available by the mobile telecoms providers



Core parts of TATT's role are **spectrum** management and **regulatory** frameworks



TATT's Vision is to be a leading **ICT** regulator, enabling an empowered and connected society



TATT's board of directors consists of a Chairman, Deputy Chairman and nine other members



TATT is a driving force behind the implementation of the ICT Blueprint 2018-2022



TATT is a proud member of the International Telecommunication Union (ITU)



The authority is also responsible for the oversight of broadcast services like TV and radio

Robustly advanced ICT networks and services

Lisa Agard, Acting CEO, **Telecommunications Services** of Trinidad and Tobago (TSTT). reveals how the company continues to drive digitalization in the country and region

Until the sector's liberalization in 2006, Telecommunications Services of Trinidad and Tobago (TSTT) was the country's only telecommunications operator and it remains the leader in fixed and mobile solutions, as well as the deployment of wireless and fiber-optic networks, among other things. Could you introduce the company and describe its importance today?

TSTT is the incumbent telecommunications provider. It is 51-percent owned indirectly by the government through National Enterprises Limited, while Cable and Wireless owns the other 49 percent. In terms of mobile communications, TSTT's bmobile is one of two brands in Trinidad and Tobago. Its 3G network covers approximately 90 percent of the population, while its 4G network covers around 70 percent. We have recently received the spectrum allocation to expand our 4G LTE's coverage to 90 percent of the population. This will also improve indoor coverage, we estimate that at peak usage, average download speeds will easily exceed 13 Mbps. We have also launched limited 5G service on some sites. As for fixed internet, after billions of dollars of investment over the years, TSTT has a state-of-the art fiber network. We currently pass about 155,000 of the 401,000 households in Trinidad and Tobago with fiber. We have also deployed a robust fiber network for businesses: whether a customer needs a metro ethernet circuit, dedicated internet access or an international private leased circuit, we are able to deploy solutions to meet all requirements. Additionally, TSTT's 4G LTE fixed wireless network covers roughly 70 percent of the population. It is designed for more rural and less-dense urban areas.

"As the incumbent telecommunications provider. we are extremely well positioned to support all of the government's digitalization plans."

Lisa Agard, Acting CEO, TSTT

Another major investment has been our development of a Telecommunications Industry Association certified Tier 3 data center-one of only nine in the entire western hemisphere. In the 10 years that we have operated it, we have had 100-percent uptime. Trinidad and Tobago is uniquely placed to provide cloud solutions to the Eastern Caribbean due to its location outside of the hurricane belt and its direct undersea cable network currently connected to Barbados, St. Lucia, Grenada, Antigua and St. Vincent. Cloud services offered by TSTT include infrastructure, disaster recovery and backup as a service. We



also have the ability to provide software-as-a-service (SaaS) solutions at a fraction of the cost of purchasing these software applications directly.

What is the uptake of advanced telecommunications in the country?

As a result of billions of dollars of investment by TSTT and other operators, we have experienced exponential growth in telecommunications. The country has 1.9-2.1 million mobile subscribers-about 145 per 100 inhabitants. Around 52 percent of people now have internet connection on their mobile device. Similarly, fixed internet has seen enormous growth utilizing technologies like fiber to the home, fiber to the curb and fixed wireless. Today, there are 351,000 internet subscribers, which represents 84 percent household penetration.

The government has made digitalization a priority. What role does TSTT have in advancing the government's digital ambitions?

ICT infrastructure is a critical foundation for national development. The government has embarked on a very ambitious program to digitize the public sector and, as the incumbent telecommunications provider, we are extremely well positioned to support all of the government's digitalization plans. Another illustration of how we are enabling its ambitions is our establishment of an innovation lab at the University of the West Indies (UWI), the first of its kind in the English-speaking Caribbean, last year. The bmobile-UWI Innovation Lab powered by Huawei will be fertile ground for research. It supports the National ICT Plan and is a milestone for education. As a country, we have to focus on the development of ICT skills and use-the lab will be a phenomenal assistance in this. A further example is the bmobile foundation, which, among its many corporate social responsibility initiatives, is playing a significant role in advancing national development by donating refurbished computers to non-governmental organizations and upgrading broadband telecommunication infrastructure in public places while continuing to invest in sport, culture, health and education.

How did TSTT respond to the COVID-19 pandemic?

The government quickly implemented a national lockdown, which translated into a significant increase in demand for broadband internet. During that period, our network throughput increased by 35-40 percent as a wide cross section of the country was either working from home or engaged in online schooling. Conversely, on the mobile side we saw a significant decline in mobile subscriptions as people were no longer nomadic, they were in a fixed space.



Our technology team worked fervently to monitor and optimize our network to ensure that our service was seamless. In terms of technology infrastructure, we responded in two key ways: firstly, we invested in additional subsea capacity. TSTT connects Trinidad and Tobago to the world through extensive, robust and resilient submarine fiber-optic cable systems that terminate directly on island. There are four cable systems coming into Trinidad and we have service on all four, with an ownership stake in two and leased capacity on the others. We purchased additional capacity to ensure we remained responsive to the growing needs of our customers. As a result of this investment, we now have 75 Gbps of capacity on our various sub-sea systems. We also received additional spectrum from the regulator. This allowed us to expand our 4G LTE fixed wireless network and enable families in more remote communities to access the internet.

In the early stages of the pandemic, misinformation around the virus was rampant. In response, we zero-rated a host of pertinent websites, including that of the World Health Organization, to give our customers free access to accurate COVID-related information. We also partnered with non-governmental organizations such as United Way to assist families most affected by the pandemic and we provided support to students preparing for exams. While we

were expanding our network and supporting the people and communities we serve, we made it a priority to support our employees as well. We facilitated staff working from home, to the extent that their jobs permitted, enforced physical distancing work solutions, and provided counseling and other services through our Employee Wellness program.



Only TSTT offers the full range of communications services in Trinidad and Tobago

A fiber optic network that can deliver speeds of up to 1Gbps



The first **company** in the English-speaking Caribbean to deliver 5G

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What are TSTT's strategic priorities for the next five years?

We're about to start our planning exercise for the upcoming period. We plan to build up the strategic pillars of the current 2016-2021 plan, which are: evolve and upgrade technology; grow revenue through broadband, mobile data, digital services and data centers; improve customer service with retail transformation, converged provisioning and billing systems, plus a zero-copper policy; and an organizational realignment to drive efficiency. In terms of technology investment, we will continue to deploy fiber solutions to residential communities, augment our offerings to business customers, enhance our mobile 4G LTE network and explore further investment in 5G. We will also further pivot our business to adjacent services and develop alternative revenue sources. For example, in 2018, TSTT started to offer its in-house electronic digital procurement solution to customers as an SaaS hosted in our data center. Another area is fintech. The pandemic revealed the inefficiency in distributing monies in a non-contact way throughout the Caribbean. It is quite clear that a digital mobile solution, even a simple one, could help governments and companies. Additionally, we will continue to expand our cloud services locally and internationally.

Do you have a final message for potential investors in the country about its telecommunications systems?

Any investor can be assured that we have the robust and advanced telecommunications networks that will enable them to operate seamlessly. All that's left to say is "Welcome to Digital Trinidad and Tobago."



Powerful portfolio of competitive advantages

Paula Gopee-Scoon, Minister of Trade and Industry for Trinidad and Tobago, showcases some of the many sectors and investment openings her country has to offer leading international investors

The U.S. is your largest trading partner, please provide a brief overview of the opportunities available for American and other foreign investors. What sectors are the most promising at the moment?

The government of Trinidad and Tobago attracts and facilitates investment by matching the country's attributes with investors' requirements. Trinidad and Tobago possesses several strategic advantages that will make such investment opportunities feasible and fruitful for foreign investors from the U.S and elsewhere. These include low electricity costs, market access to over 1.2 billion people through international trade agreements, our strategic location as a gateway to North and South America. In addition, we have a large, naturally sheltered deep harbor, and our developed maritime infrastructure and industry support mechanisms facilitate maritime and other trade. Key investment opportunities include high value manufacturing logistics and distribution, maritime, tourism, creative industries, financial services, BPO and voice contact centers.

At the centre of our diversification efforts is the Phoenix Park Industrial Estate, which occupies 144 acres and is close to our largest port—Point Lisas. The Phoenix Park industrial Estate is ideally suited for businesses operating in the areas of manufacturing, assembly, logistics and distribution. There are 76 lots of varying sizes available for light industrial activity. In the maritime sector, our goal is to become the Gateway to the Americas as we have a favorable geographic location and are very experienced in services such as ship lay-up, offshore transshipment, ship repair and drydocking.

"We possess many strategic advantages that make investment opportunities feasible and fruitful for foreign investors."

Paula Gopee-Scoon, Min Trade+Industry, Trinidad & Tobago

How significant a role does your ministry play in Caribbean Community (CARICOM) affairs, and what are the main areas of focus regarding economic integration within the bloc?

The Ministry of Trade and Industry has several important functions in the CARICOM agenda, which includes spearheading Trinidad and Tobago's participation in the Council for Trade and Economic Development (COTED). We are actively involved in the CARICOM regional strategy for services; so, in addition to a goods agenda, we are focusing on the services agenda. This



regional strategy will take us from 2020 into 2024 and aims to increase the competitiveness of the regional services sector and to strengthen the data collection infrastructure for services within the region.

The role of the digital economy is growing globally. As the fourth industrial revolution looms and countries seek to adapt to rapid change, what key priorities do you have for digital penetration and e-commerce?

Even before the COVID-19 pandemic, we commenced the implementation of several initiatives and reforms to expand the public's access to information and communication technology and create and facilitate a digital economy. These initiatives and reforms target the country's digital penetration capacity and is intended to improve the ease of doing business in Trinidad and Tobago. With regard to creating a digital economy, some key developments have been undertaken by the government, specifically through the Ministry of Public Administration and Digital Transformation. Measures include the development and implementation of a national data governance policy and framework, the update of the government's cloud policy, assisting local tech entrepreneurs to get international accreditation and information technology, bridging the digital divide by developing and implementing policies to address affordability, and equity of digital access for every segment of the population.

What is your strategic vision for the nation in the short to medium term?

In a word: diversification. Trinidad and Tobago will diversify into new, more innovative products and services while also maintaining a strong and robust energy sector. We intend to expand our export base, not only in traditional markets, like the U.S., CARICOM and Europe, but also non-traditional markets. We intend to create a more attractive and enabling environment for businesses and investments by implementing measures to increase efficiency and productivity and reduce the time and cost of doing business in the country.

Finally, what is your key message to the readers of Newsweek?

We are an experienced marketplace, used to facilitating foreign investment. Trinidad and Tobago is well established as an energy province in terms of our natural resources and are are used to facilitating large international companies. We have a cadre of very highly educated and skilled personnel, available for all the sectors I have identified. We also have preferential access to billions of consumers in the global market space.

