



BUILDING
OUR
PEOPLE
AND
PLACES













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# **CARIBBEAN BACKSTORY**



Before the 21st century, the Caribbean was a collection of island and coastal territories connected by climate and a common sea. Shawn Smith was born in Suriname, about 9 months after Owru Yari 2000. As one of the first citizens of the new millenium, he grew up during an age of political and economic turmoil under an unprecedented wave of global technological advancement.

At a young age Shawn's exposure to the cultures, languages, and people of the Caribbean fostered his lifelong fascination with humanity, but no one fascinated him more than his secondary school sweetheart, Preeta Singh. He and Preeta married in front of family and friends before they both moved to Miami, where Shawn earned a PhD in Sociology.

Shawn graduated in 2025. That same year, Preeta gave birth to their son, Ricky. Meanwhile, the Caribbean rose in global prominence, unifying politically and economically to lead the world in the development of an environmentally-conscious ideology and most notably, the technological development of Green Hydrogen Energy as a zero emission fuel source.

These breakthroughs opened the door to a plethora of technologies that further enhanced the region's status in the world. By the time Preeta and Shawn welcomed their second child, Marlyn, Shawn had become fascinated by the developments in the Caribbean, already a major force for innovation across the world.

By 2040, the Singh-Smiths have recently moved back to the Caribbean, Shawn having secured a job studying the societal benefit of the many transformative inventions emerging from his former home. Now, his family accompanies him on a day of sightseeing as Shawn begins a journey to the most difficult of those inventions to access...

PREETA



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JOIN US!

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"We must have the cultural confidence to develop technologies of our own kind, on a timeline that plays to our strengths and which captures the imagination of our own people."



Mia Mottley, Prime Minister of Barbados

## THE PROCESS







The Inter-American Development Bank (IDB) invited Singularity University (SU), a global learning and innovation community, to facilitate workshops with Caribbean leaders and entrepreneurs at the Pivot Event. The objective was to develop moonshots to transform the region. Each team was led by an SU Expert with significant experience and knowledge within the moonshot area. The three areas of focus included: The Future of Transportation, Digital Transformation, and The Future of Tourism.

The SU Experts utilized a strategic narrative and design thinking approach with the Pivot 2020 Future Makers during the event, enabling teams to ideate technology and concepts capable of driving innovation in the Caribbean. Future Makers were pushed to think exponentially about innovative concepts that could lead to significant positive impacts on the societal, technological, economic, environmental, and political aspects of the region. At the culmination of the Pivot Event, each group pitched their moonshot concept to the larger audience.

Following the final pitches, Singularity University continued to explore and unpack how the moonshot concepts might manifest in real life using our strategic narrative process. Each of the nine moonshot concepts in this manifesto have been developed into fictional stories as a simple and powerful means of conveying possible, probable futures.

### **ABOUT THIS MANIFESTO**







For the Caribbean, the nine moonshot scenarios in this book provide a human lens through which to imagine real-life interactions in the future of the region. There are infinite variations of the potential future, but the personas and themes developed for this story are representative of the most impactful challenges and opportunities the Caribbean will face.

Each scenario is illustrated by a talented Caribbean artist.

# PIVOT 2020 FUTURE MAKERS COHORT







# ELECTRIC VEHICLES

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Rvan Janssen

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Vashti Dookiesingh

Victor Molina

Vishok Persaud

Xarielle Gittens

"We love our culture. We love our cuisine. And we love our music.

And most of all, we love each other.

Our uniqueness binds us. When one Caribbean people succeeds, we all succeed. And history is littered with many of our successful people. So in making these moonshots for the Caribbean, when one idea succeeds, we all succeed."



Dr. Mohamed Irfaan Ali, President of the Cooperative Republic of Guyana

# CARBON OFFSET-BASED LIFESTYLES



#### **ILLUSTRATOR**

Mariyah Rahman

#### THE MOONSHOT CONCEPT

Tourism is one of the central pillars of the Caribbean economy, but the most regrettable tradeoff to the financial benefit of so many visitors has been their unintentional impact on the region's environment. Everything changed by 2040, with the implementation of the Caribbean's Carbon Offset Economy.

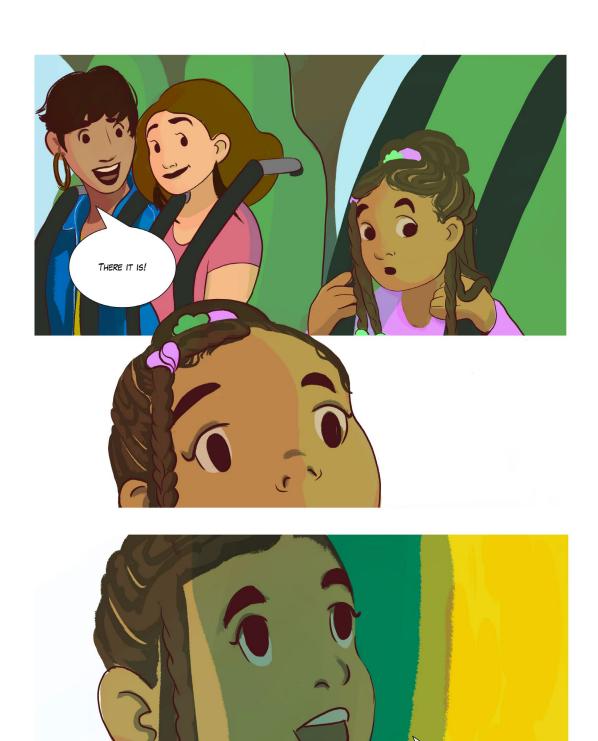
Visitors receive discounts on everything from food and drink to travel and lodgings as a reward for leaving a smaller carbon footprint while enjoying the splendor of the region. These discounts are subsidized at every level of the tourism industry, from hotel and vendor chains to local produce suppliers down to independent tour guides working a side hustle. Even promoting the program on social media can provide discounts commensurate with a traveler's public profile, improving the tourist trade and reducing its impact on the Caribbean's natural splendor.











HOLY COW, LOOK AT THAT THING!

# YOU, ME, AND SEA WEE



#### **ILLUSTRATOR**

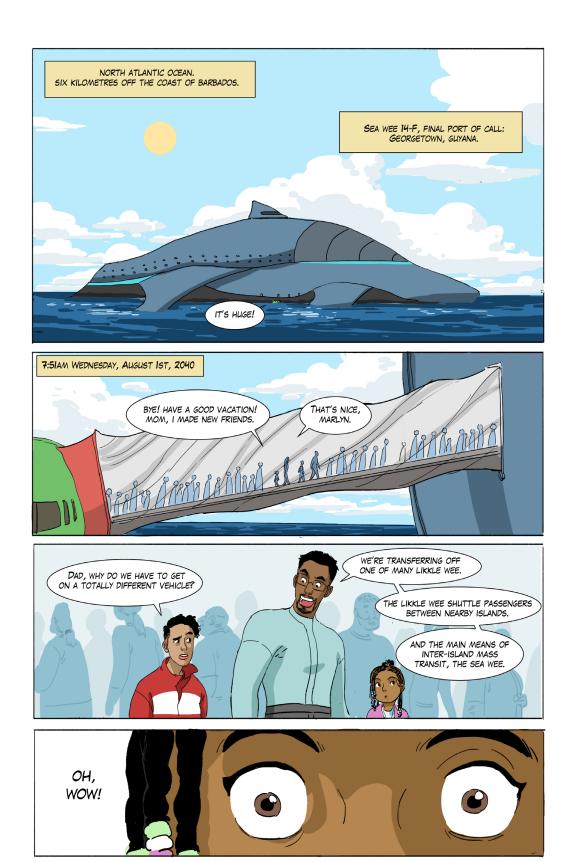
Rajendra Ramkallawan

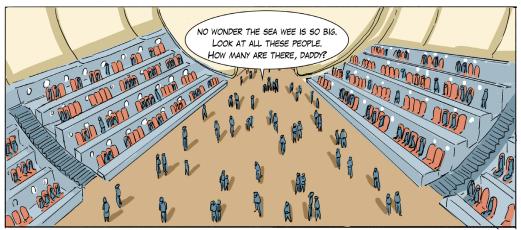
#### THE MOONSHOT CONCEPT

The Sea Wee is a rigidbody public transportation vessel capable of traversing the entire island chain in under six hours, from the Bahamas all the way to Guyana. Sometimes travelling while partially submerged, the Sea Wee can achieve a top speed of 240 miles per hour thanks to its hydrofoils. The Sea Wee's unifying power for the region extends to the onboard experience, which encompasses the entire Caribbean diaspora, from food courts to shopping to an interactive underside observatory with a live-display.

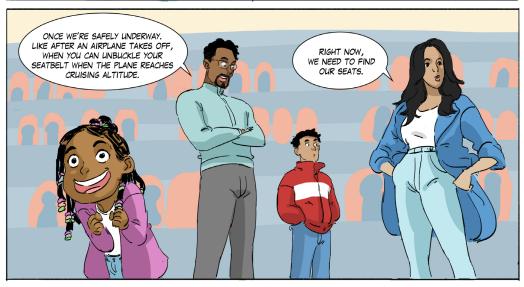
Passengers are shuttled from their respective islands to the enormous Sea Wee without interim stops at multiple ports-of-call by many 'Likkle Wee', smaller, shorter-distance versions of the Sea Wee scattered across the Caribbean, allowing the Sea Wee to cover ground with maximum efficiency. Utilizing shipping lanes and sonar detection of undersea life minimizes direct impact on the ecosystem, but the Sea Wee's most impactful benefit to the environment lies in the way it is powered...

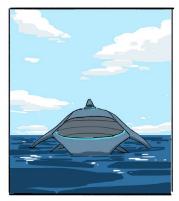
Sunlight, wind, waves, and current. Each of these define the Caribbean and all of these are untappable sources for producing hydrogen energy. When hydrogen is used to generate energy, the only byproducts are water and steam. Back in 2020, a number of industries had begun to use Grey Hydrogen, which requires a hydrocarbon fuel to produce the hydrogen energy, creating a carbon dioxide byproduct with a negative environmental impact. In developing the Sea Wee and other Green Hydrogen Energy vehicles, the Caribbean became the world leader in defining zero emission Green Hydrogen as the premiere energy source across the globe.













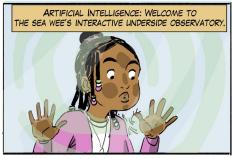


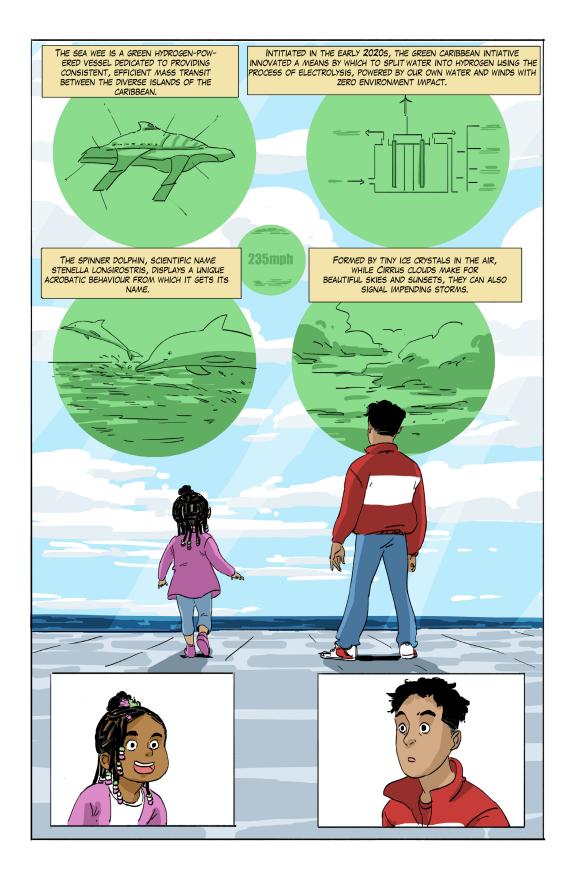


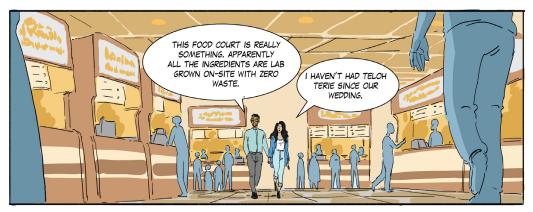






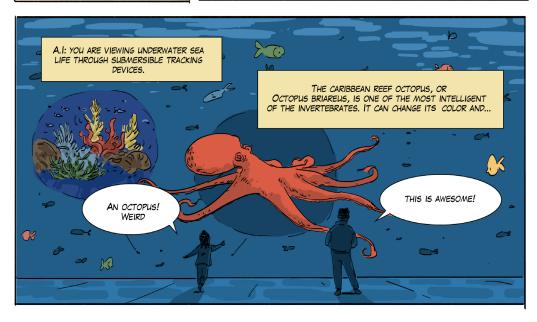






















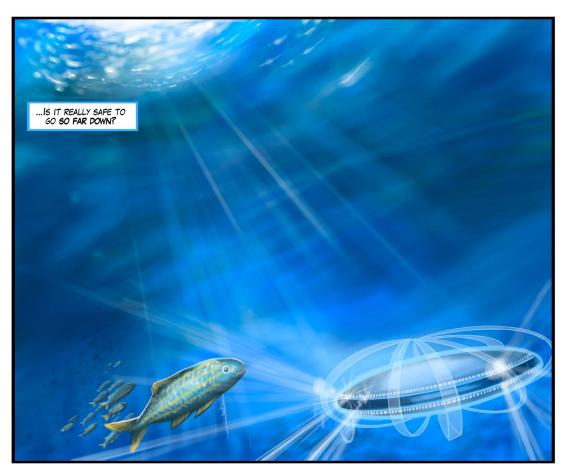
#### **ILLUSTRATOR**

Shaun Riaz

#### THE MOONSHOT CONCEPT

By 2040, structural expansion has placed land resources in the Caribbean in short supply. Due to this, the preceding years saw a trend of underwater facilities beginning to emerge. The development of adaptive, self-assembling architecture opened the door to investment in a new class of practical, self-sustaining underwater facilities.

As the most versatile constructions in human history, these structures accommodate environmental conditions by undulating and warping with the underwater currents and adjust depth by altering internal pressure. They are able to facilitate transfer of passengers and cargo just below sea level. As an added benefit, the surfaces of these underwater facilities are coated with micro-fragmented coral, creating a small biome that helps contribute to the rehabilitation of marine life.









DEPTH 7451 METRES

PRESSURE 10990 PS1

OXYGEN LEVEL 20.37%

SUBMERSION LEVEL RESOLVING



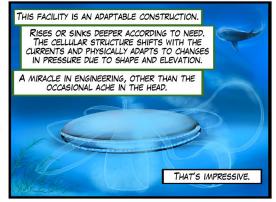


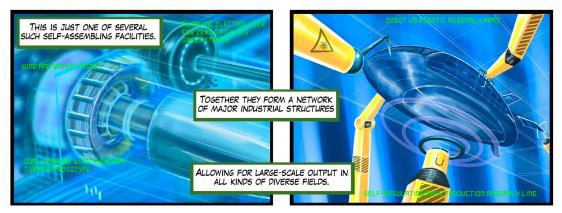


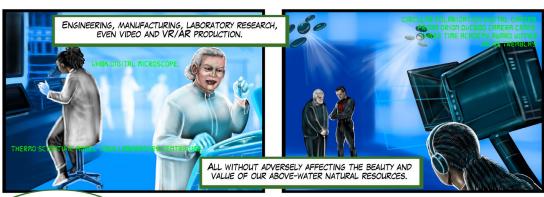


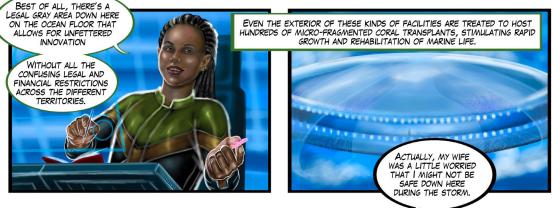














# MANAGER OF INTEGRATED SOCIETAL SYSTEMS IN THE CARIBBEAN (M.I.S.S.C.)



#### **ILLUSTRATOR**

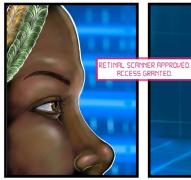
Shaun Riaz

#### THE MOONSHOT CONCEPT

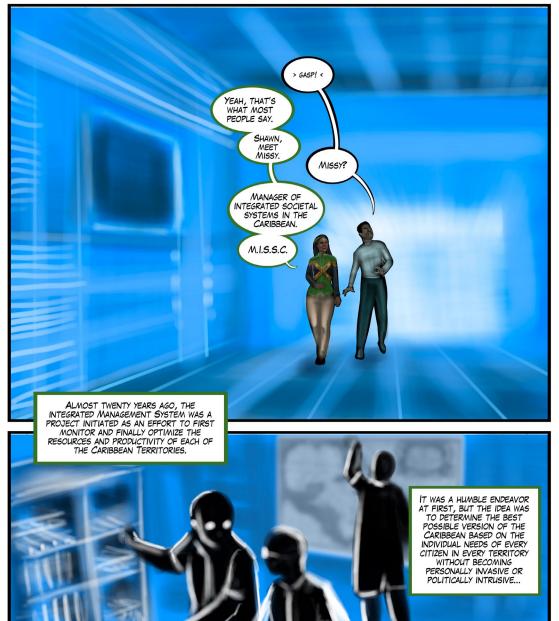
With a never-ending influx of information from every source imaginable becoming the norm, determining an efficient approach to process such a massive spike in data as fast as it was coming in became a necessity. The Integrated Management System (I.M.S.) was initially envisioned as a pan-territory monitoring service tied to a comprehensive and all-encompassing sensory array across the Caribbean.

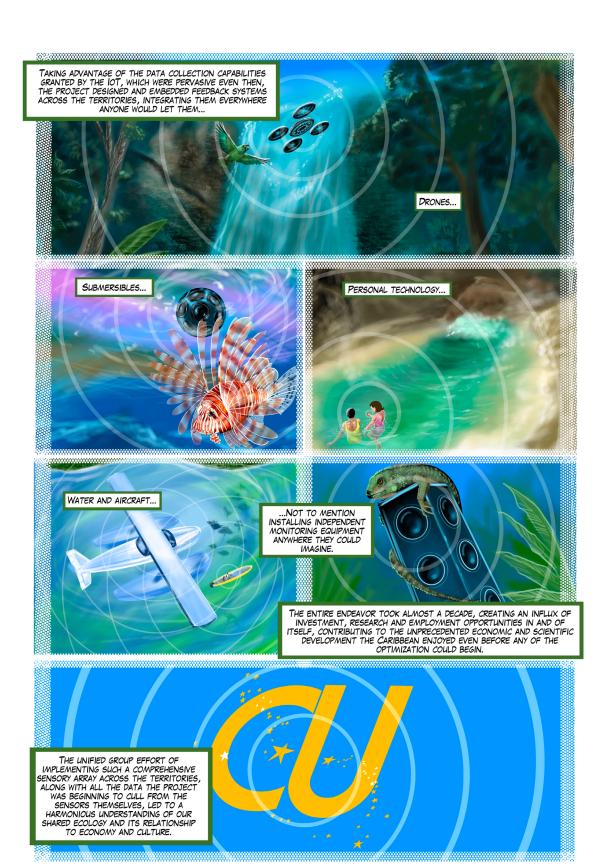
I.M.S. was later endowed with a cutting edge Artificial Intelligence capable of parsing, organizing, and processing all of that data faster and more accurately than any team of humans ever could, becoming the Manager of Integrated Societal Systems in the Caribbean (M.I.S.S.C.). Reducing costs of production and increasing revenues while eliminating food and water poverty, the M.I.S.S.C. would become one of the most important cornerstones to building a better Caribbean for 2040.





















# BLURRED REALITY, VIRTUAL CLARITY



#### **ILLUSTRATOR**

Rajendra Ramkallawan

#### THE MOONSHOT CONCEPT

In the years running up to 2040, the need to streamline resource management and economic opportunities in proportion with the size of an ever-expanding Caribbean population became vital. The key to successfully unifying the Caribbean was predicting how much water, food, and specialized training would best serve each territory and when.

Fortunately, blockchain technology allowed for the secure cultivation of a sufficient mass of data to create a Digital Twin for nearly every citizen in the region, essentially creating a virtual version of the Caribbean. Using that 'virtual Caribbean' to model scenarios at any scale allows for the extrapolation of outcomes years in the future as well as an intricate analysis of individuals during a specific moment. The applications are limitless, from law enforcement trends to predictive healthcare to ecological preservation. Most beneficially, recommending major life choices for individual Caribbean people such as education and occupational specialization can serve the interests of both the individual and the many.

FROM THE BEGINNING OF THEIR LIVES, EVERY CITIZEN OF THE CARIBBEAN'S BEHAVIOURS, CHOICES AND NEEDS MAY BE CONTRIBUTED INTO THE INTERGRATED SYSTEM.

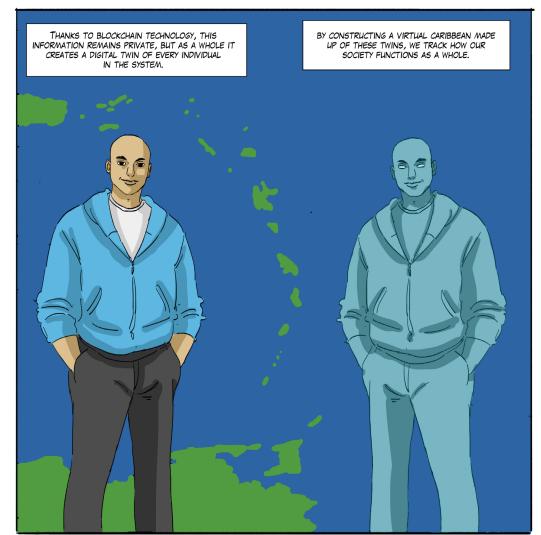


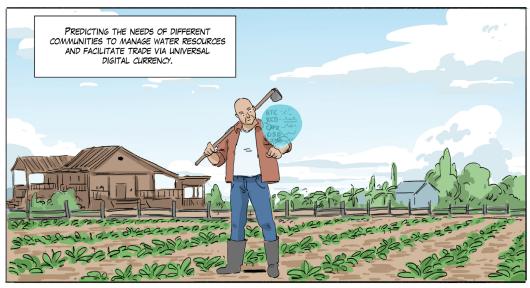
COMBINED WITH FAMILY HISTORY AND GENETIC PROFILING, THIS DATA CAN BE USED TO PREDICT THE MEDICAL FUTURE OF EVERY INDIVIDUAL, DETERMINING AN OPTIMAL LIFESTYLE.



THESE DIGITAL PROFILES CONSTANTLY CROSS REFERENCE TO GUIDE OUR CITIZENS TOWARDS EDUCATION AND CAREER CHOICES THAT BEST SUIT THEM AND THE CARIBBEAN AS A WHOLE,





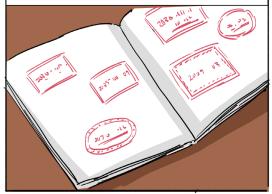






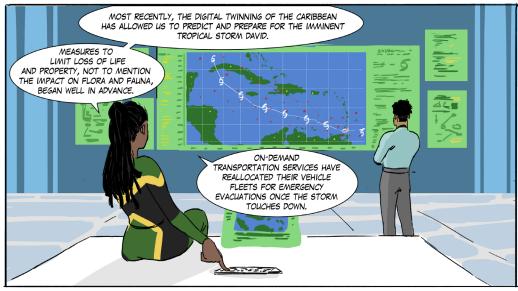


INSTEAD OF TOURISTS FOREGOING TRUE TRAVEL FOR ITS DIGITAL SUBSTITUTE, VIRTUAL TOURISM HAS LED TO AN UPTICK OF IN-PERSON VISITS.



SHARING THE EXPERIENCE OF THE REGION HAS LED TO SIGNIFICANT SOCIAL AND POLITICAL DEVELOPMENT BOTH BETWEEN THE TERRITORIES AND INTERNATIONALLY. THE CARIBBEAN HAS BECOME A LEADING LIGHT WHILE FEELING LIKE A SECOND HOME TO PEOPLE ALL OVER THE WORLD.









Everard McBain

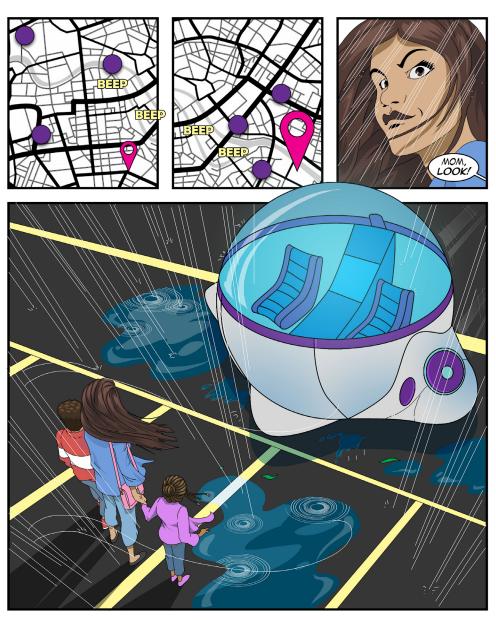
#### THE MOONSHOT CONCEPT

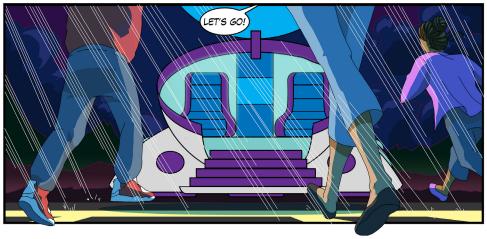
Intended to serve more disconnected communities across the Caribbean, the Flying Fish fleet is an affordable, self-piloting mode of on-demand transport, requested through a mobile app interface. The Flying Fish is able to travel over land and water, and therefore does not require the traditional infrastructure necessary for most private vehicles.

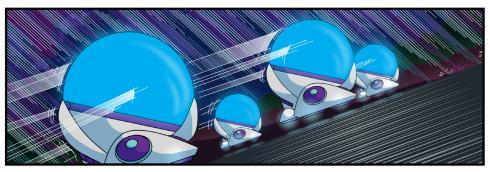
A single Flying Fish can generally sustain its power supply using Green Hydrogen Electrolysis with the wind and water collected during operation. Occasionally, a Flying Fish might recharge itself in one of many "ponds" constructed across the Caribbean specifically for that purpose. Subscribers can be certified online to manually pilot the vehicles if necessary, though this is generally a measure to be used only during emergencies.

Flying Fish are capable of transporting a family-sized group ranging between eight to twelve people by linking up to four units together or traveling individually with four passengers. The only byproduct of the Green Hydrogen Energy powered Flying Fish is potable water. This helps the Flying Fish also serve as a mobile storm shelter that safely shields passengers with its transparent dome that redirects heavy wind and pounding water.















#### **CHAPTER 7**

# AMBASSADORS OF ABUNDANCE



### **ILLUSTRATOR**

Rajendra Ramkallawan

#### THE MOONSHOT CONCEPT

With basic needs such as food, clothing, water and work being met for almost everyone in the Caribbean, a new lifestyle of wellness was introduced. This happened first in schools as part of a formal curriculum instructing in meditation, mindfulness, and mutual goodwill. Children were taught to care for themselves and each other, putting a value on fellow humanity to a level not previously seen in the world.

Sooner than anyone expected, this spread to the entire population of the region, and the Caribbean people became ambassadors of spiritual and psychological abundance. Living examples of how a philosophy of fulfillment led to a more prosperous and functional culture, with the natural beauty and serenity of the region greatly adding to the effect. By 2040, things were looking bright and the future could only get brighter.



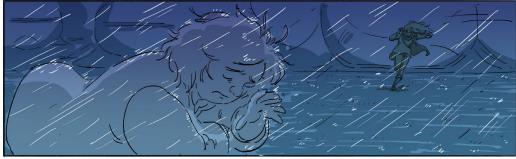




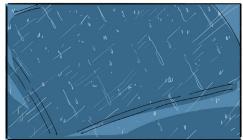








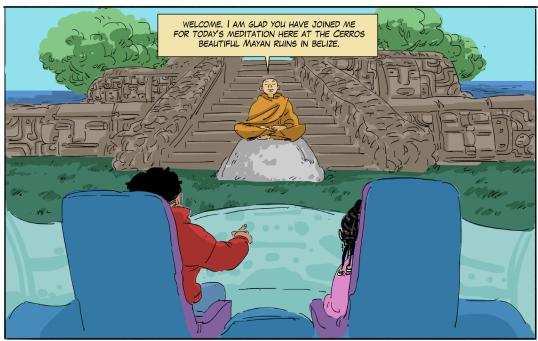




















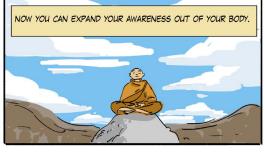












#### **CHAPTER 8**





#### **ILLUSTRATOR**

Everard McBain

#### THE MOONSHOT CONCEPT

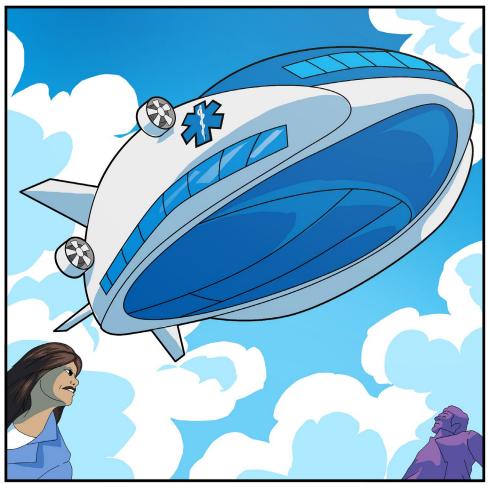
The Fete Travail is another form of inter-island transportation. Unlike the water-borne Sea Wee, the Fete Travail is a flight-based mass transportation system that uses direction-shiftable blades allowing for exceptional maneuverability and incredibly light touchdown. Based on a Lockheed Martin prototype airship from the 2020s, the Fete Travail is so gentle that it can land on a crab without injuring it.

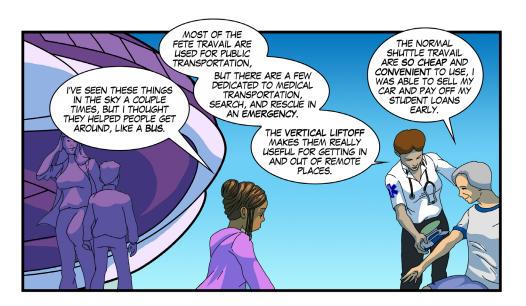
Deployed as both public and private transportation as well as emergency searchand-rescue capable of reaching otherwise inaccessible locations, the name Fete
Travail is a mix of the concepts "party" and "work," signifying the dual function
of the different vehicles operating throughout the Caribbean in 2040. The Fete
Travail is able to host a private group of recreational sightseers one trip then
facilitate a mass rescue of stranded wilderness enthusiasts the next.

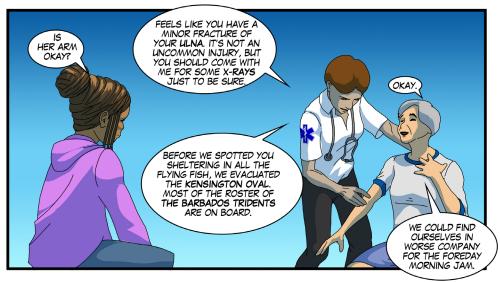


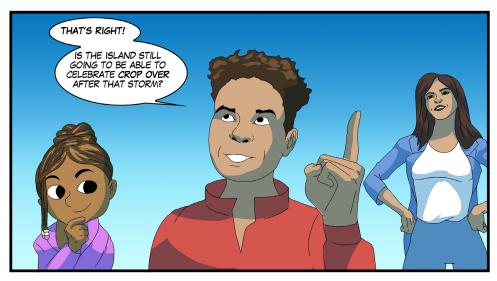












#### **CHAPTER 9**

# CARIBBEAN REALITY



#### **ILLUSTRATOR**

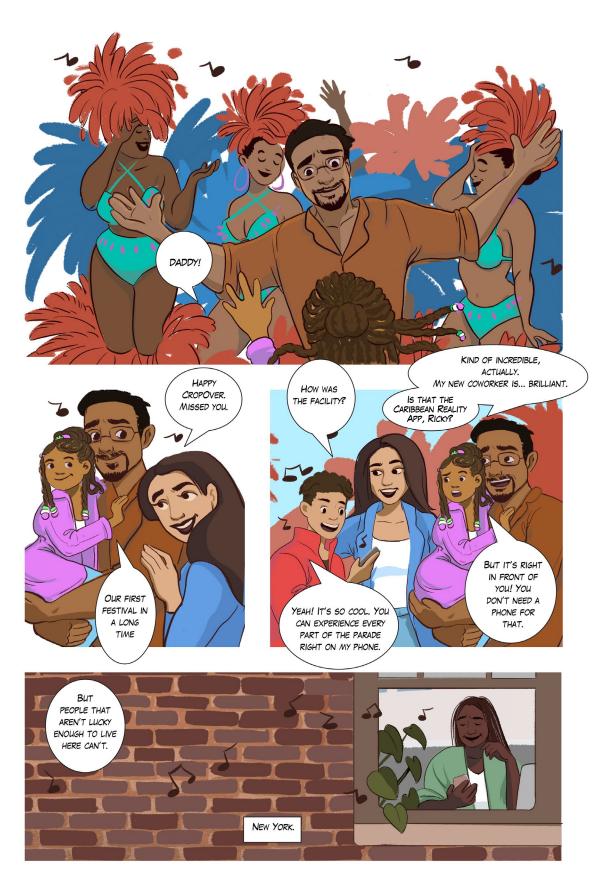
Mariyah Rahman

#### THE MOONSHOT CONCEPT

With the abundance of Digital Twins creating a landscape rendered precisely enough to generate a virtual version of the entirety of the Caribbean, the opportunity to provide access to anyone anywhere in the world was irresistible. Caribbean Reality is an app designed to preserve, celebrate, and make digitally available the Caribbean experience. The Caribbean can be accessed either from a purely sensory standpoint, exploring the beauty of the region from the comfort of one's home, or more from a more psychologically intimate one, from the personal perspective of one of its many citizens. Some of these experiences are free, while others can be provided to the user for a small cost.

This has led the culture and flavor of the Caribbean to become universally familiar around the world, similar to the effect American television had across the globe back in the 20th century. Most popular of all are the multi-perspective digital versions of the many Carnival-esque festivals, celebrations, and parades, some of which have become mass cultural events experienced by many millions of people simultaneously around the world.

















### JOIN US!



When we set out to create a space for the big ideas to drive Caribbean development, we couldn't dream that a movement would ensue. But the enthusiasm and excitement inspired by Pivot proved that there was a void waiting to be filled in our region, by our people.

Not only was there a need for urgent, innovative, and sustainable solutions to the problems facing the Caribbean (like climate change), but there was also a need for an injection of what Prime Minister Mia Mottley referred to as cultural confidence; the belief that our ideas are valuable to the world.

And we are proud to say the Pivot Movement has begun to fill this void. Throughout the pages of this book, you have seen the vision for the Caribbean in 2040. These moonshots originated in the minds of Future Makers who were given the space and the freedom to think big and work together. And just look at what we have created!

Looking ahead, our mission is to remind all Caribbean people that they too are Future Makers bursting with big ideas. Our homes, schools, and workplaces must be innovative spaces where we all have the freedom to create the future we want to live out. We believe that this is the essence of Pivot. And our role at IDB will always be to create the virtual and physical launch pads for your moonshots.

We look forward to seeing the pictures on these pages come to life as we build the people and places of the Caribbean together.

Thank you for making moonshots with us.

Therese Turner-Jones,

General Manager of

Country Department Caribbean Group, IDB











