



# IN THE K-NOW

*Quarterly Newsletter*

**THE GAME-CHANGING  
IMPACT OF LEGAL  
REFORM IN DRIVING  
GLOBAL DIGITAL  
TRADE** *By Ms Vashti Maharaj*

**CUBA'S FIRST ROBOTICS  
GENDER HACKATHON**



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A photograph of two women in professional attire high-fiving. The woman on the left is a Black woman with glasses, smiling. The woman on the right is a white woman with glasses, also smiling. They are in a bright, modern office setting. A large, semi-transparent orange circle is overlaid on the bottom half of the image, containing the text.

## LEADERSHIP AND CARIBBEAN WOMEN IN ICT - A MINIATURE BIOGRAPHY

by Raj Ramdass

### Early Years

Abby's idea of leadership was shaped by her surroundings. Instead of inspirational figures, leaders seemed like figures of authority who often wielded power in harsh ways. The memory of a bossy class prefect and her mother's struggles at work reinforced this belief.

She studied hard in school and one day, she joined a Restore a Sense of I Can (RSC) Tech Club. In this club, she discovered her passion for Science, Technology, Engineering and Mathematics (STEM) and Information and Communications Technology (ICT). After graduating with a degree in ICT from The University of the West Indies (UWI), she landed what she thought was her dream job.

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### **World of Work**

But that reality had surprises. With the passage of time, the initial excitement faded and exhaustion eventually crept in. The workload became overwhelming as evidenced by many tasks and insufficient time for completion. Constant training to stay updated and the struggle to rally others to cooperate and accomplish tasks left her feeling drained. She felt the weight of expectations every day and wondered how she would cope with marriage and a family on the near horizon.

### **Role of Mentorship**

One day at work, she bumped into a senior colleague from another department. What caught her attention was how effortlessly this person handled tasks. Oftentimes, radiating a sense of peace and confidence. People naturally flocked to them, drawn by their friendly nature and efficient work style. Curious, she built up the courage to ask about their secret. To her surprise, the senior colleague not only shared their insights but did so with genuine care and kindness.

From their conversation, she discovered the value and importance of time management. By prioritizing tasks, and with a positive attitude, she realized she could get more done with less stress. But she wondered how she could master this skill.

### **Change and Growth**

With her new mentor's guidance, she delved into books, seminars, and podcasts, absorbing the experiences of others. Learning from their journeys, she uncovered hidden paths to success.

She also learned to communicate better with her peers and to empower others - just like her mentor did. Her team building skills improved, along with her adaptability and decision-making. Before she knew it, she found herself leading projects and her team enjoyed working with her. She realized that true leaders aren't bullies. Leadership, she discovered, is about empowering others and achieving goals together. She embraced John Buchan's adage:

“

*The task of leadership is not to put greatness into humanity, but to elicit it, for greatness is already there.*”

She kept learning, and thankfully so, as the widespread adoption of Artificial Intelligence (AI) brought forth vast possibilities alongside significant concerns. Exploring the potential of AI required leadership skills to navigate uncharted territories. It also expanded productivity, vision, and opportunities into new frontiers. Merely having ICT training in this new world could no longer suffice.

### **Contentment**

One Sunday morning, a smile graced her lips as she watched her baby inching closer to her. A sense of pure joy filled her heart as she now embraced the person she had become.

Believing this moment couldn't possibly get better, the door swung open and in walked her husband, carrying *doubles*[1] and a bag of *toolum*[2].



[1] Doubles is a local dish made in Trinidad and Tobago that consists of flour (called bara) and seasoned chana or chickpeas. This dish is of Indian origin. It can be consumed as meal for breakfast, lunch or dinner.

[2] Toolum is a sweet snack or dessert made from molasses, coconut, ginger and other ingredients. These ingredients are rolled into a ball (around the size of a table tennis ball) and served for consumption. This sweet is popular in Trinidad and Tobago and has a chewy and sticky consistency.


# THE GAME-CHANGING IMPACT OF LEGAL REFORM IN DRIVING GLOBAL DIGITAL TRADE

BY VASHTI MAHARAJ



## An overview of global and digital trade

Global trade has driven the development of civilizations. The quest to expand trade routes has taken mankind to the vast extremities of the planet. It has also opened up new horizons that have contributed to the discovery of the New World. We have evolved through centuries of forging trade routes leading to increased globalization. The depth and complexity of global trade continues unabated. It is one of the formidable pillars that drives our economies and many of the foundational trade

A close-up photograph of a bronze statue of Lady Justice, the personification of the Roman goddess Iustitia. She is blindfolded and holding a scale of justice. The statue is set against a light blue background.

continues unabated. It is one of the formidable pillars that drives our economies and many of the foundational trade laws that have been refined and institutionalized over centuries. The last few decades have witnessed a paradigmatic shift towards the increased digitalization of trade and commerce. This move is characterised by the integration of digital trade into global value chains.

Whilst there is no globally accepted definition of digital trade, this fundamentally encompasses digitally enabled transactions of trade in goods and services that can either be digitally or physically delivered. The actors involved in digital trade include consumers, firms and governments[1].

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[1] OECD definition is accessible at: <https://www.oecd.org/trade/topics/digital-trade/>

Digitalization has the potential to increase the scope, speed and scale of global trade. The integration of new and emerging technologies has introduced added value gains in terms of cross border coordination, efficiency and transparency. This move towards digital transformation gained acceptance, popularity and momentum because of the resulting impact of the coronavirus disease (COVID-19) pandemic, as well as recent trade disruptions arising out of armed conflict. Both trade distortions have emphasised the importance of building resilient and sustainable digital economies.

electronic windows and electronic trading platforms and innovative Application Programming Interface (API) to the use of blockchain technology, Internet of Things (IoT), machine learning and Artificial Intelligence (AI) in trading systems.

However, to realize the maximum gains of such innovation, there must be a confluence of legal reforms to pave the way for new ways of doing business. One of the greatest obstacles facing rapid technological advancement has been slow legal reform. This is evident when traditional arcane laws still require:



### **Keeping up with Trailblazing Technology**

Over the years, we have seen that the transformative infusion of technology into traditionally manual based operations has served as a catalyst for the way in which we do business and become more agile in creating new markets. The result has been the introduction of single

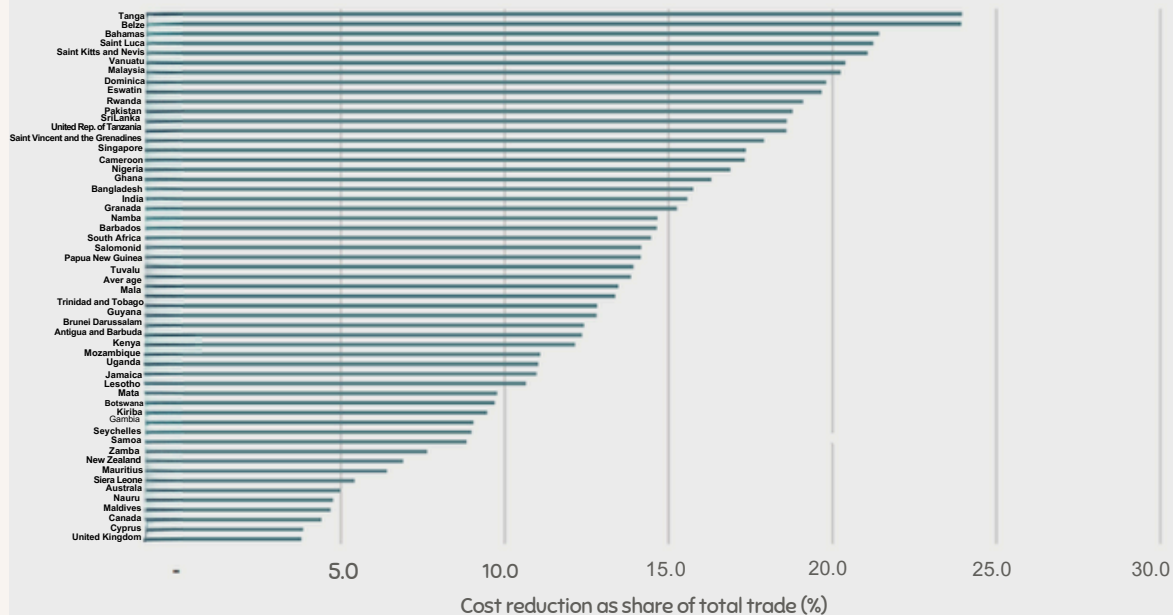
(1) manual-based processes; (2) the submission of a multiplicity of forms; and (3) protracted processing times that considerably drive-up transactional costs. The aforementioned then leads to inordinate delays and creates opportunities for corruption and human error to occur.

One of the foundational elements for advancing digital trade is therefore legal reform. Legal reform can create an enabling environment for improved cross-border global trade. There is very compelling evidence that points to the invaluable benefits to be derived from this trajectory. In the report on the *Quantitative Analysis of the Move to Paperless Trade*[2], it was highlighted that digital trade facilitation across borders could increase trade across the Commonwealth by around US\$90 billion, and legal reform to support the digitalisation of

electronic records could unleash as much as US\$1.1 trillion, bringing the total benefits from paperless trade to nearly US\$1.2 trillion by 2026.

A major finding of this report is that Small Island Developing States (SIDS) stand to be the dominant beneficiaries in terms of the total percentage of reduction in trade costs arising from digitalization. This cost reduction is directly linked to market creation and the enabling impact that technology instigates.

2020-26 Reduction in trade costs from digitisation as a share of total trade (%).



Source: Author's calculations from Coriolis Technologies trade data, Ease of doing business data and meta-analysis.

[2] Digitalization has the potential to increase the scope, speed and scale of global trade. The integration of new and emerging technologies has introduced added value gains in terms of cross border coordination, efficiency and transparency. This move towards digital transformation gained acceptance, popularity and momentum because of the resulting impact of the coronavirus disease (COVID-19) pandemic, as well as recent trade disruptions arising out of armed conflict. Both trade distortions have emphasised the importance of building resilient and sustainable digital economies.



Even though digitalization is very critical to moving global trade ahead, it is imperative that it be adopted alongside the requisite legal reforms. In its recent report on *Seizing the moment: Unleashing the potential of trade digitalisation*[3], The International Chamber of Commerce (ICC) Centre for Digital Trade and Innovation (C4DTI) highlighted that “[t]he risk is that governments that don’t remove legal barriers will get left behind and become uncompetitive.”

### **Effective Legal Frameworks for Building the Digital Economy**

On February 13th to 15th, 2023, the Commonwealth Connectivity Agenda (CCA) partnered with the Caribbean Telecommunications Union to hosting a training Workshop on Effective Legal Frameworks for Building the Digital Economy. This workshop was hosted because of recognition of the importance of creating strong and resilient digital economies and the need to create an adequate enabling environment and cohesive legal frameworks within the Caribbean (see photo below).



In this photo, **Mr. Rodney Taylor** (centre - blue suit), Secretary-General of the Caribbean Telecommunications Union (CTU) is flanked by training workshop participants who attended the workshop titled: Effective Legal Frameworks for Building the Digital Economy.

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[3][https://iccwbo.uk/wpcontent/uploads/2024/04/Seizing\\_the\\_moment\\_Unleashing\\_the\\_power\\_of\\_trade\\_digitalisation\\_report.pdf](https://iccwbo.uk/wpcontent/uploads/2024/04/Seizing_the_moment_Unleashing_the_power_of_trade_digitalisation_report.pdf).

## Forging the Way Ahead

As countries pursue the legislative reform journey, it is integral to keep in mind the ultimate objective of facilitating interoperability in transnational trade is to create the ease of doing business. It is important to know that we are not in this journey alone and a competitive advantage can therefore be attained by alignment with best practice models. This includes the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Electronic Transfer Records (MLETR)[4]. It contains provisions in relation to the legal use of electronic transferable documents (including bills of lading, bills of exchange, promissory notes and warehouse receipts) both domestically and across borders. Additionally, another future development, is the work of the Commonwealth Working Group on Legal Reform and Digitalization in the development of a Commonwealth Model Legislative Text on Digital Trade. This model seeks to formulate a comprehensive and adaptable framework for legal reforms needed for Commonwealth member countries to transition to

paperless trade. This model, therefore, serves as a useful roadmap and guide for the way ahead. To this end, the CCA continues in its commitment to providing support to the Caribbean in its digital trade journey. In my opinion, this has been one of the most rewarding parts of my career. I have had the opportunity to contribute to change – impactful change that is needed now.

The digitalization of trade involves bringing together many essential pieces, viz. technology and interoperability, digital skills development and change management, legal reform and standards to build a resilient and sustainable digital economy. In the grand scheme of things, the most foundational critical enabler, may in fact be the easiest to achieve once there is recognition of its transformative value and the political will to drive the process to fruition.

*Author: Vashti Maharaj, Acting Head and Adviser, Commonwealth Connectivity Agenda (CCA), Trade Oceans and Natural Resources Directorate, The Commonwealth Secretariat*

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[4] Accessible at: [https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic\\_transferable\\_records](https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records)



## CUBA'S FIRST *(English Version translated)* ROBOTICS GENDER HACKATHON

For several years now, Cuba has been promoting the development of information and communication technologies (ICTs) to all sectors of society. One example of this is evidenced by the active participation of women and girls in all the development programmes for the computerisation of Cuban society and digital transformation. Cuba's involvement in the above is linked to the 2030 Agenda and the United Nations Sustainable Development Goals (SDG). The fifth SDG goal states: To achieve gender equality and empower all women and girls. One of the targets for this SDG is to: "enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women."

### **Junior Computer and Electronics Club**

The Junior Computer and Electronics Club (JCCE), hereafter referred to as the Junior Club, is a network of technology centres inaugurated by Fidel Castro Ruiz on 8th September 1987. The aims of these clubs are: (1) providing ICT-related services to all sectors of society; and (2) enabling the development of digital skills and competencies not only in children, adolescents and young people, but also in older adults. Since its inception, more than 5 million Cubans have graduated in ICT-related courses from the Club. Additionally, 1,973,000 of these graduates were women.

In its more than 1,000 computer labs throughout the island, it has introduced girls to ICTs from an early age. This has resulted in the promotion of vocational training and professional orientation in ICT, a reduction in the digital divide and the achievement of greater empowerment of our women.

In 2018, thanks to a grant from the United Nations Educational, Scientific and Cultural Organization (UNESCO), Junior Club began to incorporate educational robotics into its curricula. Today, it has more than 23 robotics labs where girls develop their logical thinking. Some of the reasons advanced for educational robotics includes:

- solving problems in teams;
- proposing more attractive ways of teaching mathematics, history or chemistry; and
- awakening interest in disciplines such as computer science.

The Junior Club's educational robotics project has enabled the girls to generate environments conducive to integrated work through technological scientific processes, such as creating and programming robots.



This is essential in the concept of an interconnected society, especially when it comes to developing logical thinking for the analysis and solution of different situations - a learning process based on shared knowledge. It also seeks to discover skills in each person from childhood onwards, through the use of educational games in basic subjects such as electronics and programming logic. This allows them to develop a vocational profile with careers in mathematics and engineering such as Biomedicine, Telecommunications and Automation which promote these options in society.

### **FIRST Robotics Gender Hackathon**

As part of the pre-event of the Special Session on Human Capital and Gender within the framework of Informática 2024, the Ministry of Communications of the Republic of Cuba launched the FIRST Robotics Gender Hackathon.

The event aimed to raise the vocational training and professional orientation of our girls, adolescents and young women in ICT, automation and electronics. Its purpose was also to encourage girls to develop their skills in technological and digital competences through the creation of robots capable of solving problems or needs. The result was to foster in them an interest in science, technology and applied innovation.

These participants had to complete a challenge. This involved creating a multi-legged, insect-like robot that could move. Its dimensions were not to exceed 20cm in length and width. Additionally, the robot had to be electromechanical and autonomous.



More than twenty girls participated in the competition. The winner was the Flight to the Future Project of the Central Computing Palace. This is a centre with more than thirty years of experience in promoting a computer and digital culture in our women, with great experience in robotics, electronics and automation. The leader of this project, Rolando Moitt Graham, who has more than thirty years in the computer and electronics sector, is in charge of developing the skills and encouraging the girls' passion for these subjects. This is demonstrated by Carla de la Puente Rodríguez, Evelyn Almaguer Garrido, Katheryn Glenda Alcántara Marlonés - winners of the FIRST Robotics Gender Hackathon and winners of the XIX International Convention and Informática Fair 2024.

### **Conclusion**

It is crucial to continue efforts towards achieving greater equality in access to and utilization of ICTs. It is also equally important to continue to develop digital skills in girls. These actions will enable not only Cuban girls but girls worldwide to actively participate in the digital society.

# PROYECTO DE ROBÓTICA VUELO AL FUTURO

*(original article of  
the Cuba's  
Robotics project  
in Spanish)*

Cuba desde hace varios años ha impulsado el desarrollo de las tecnologías de la información y la comunicación (TIC) a todos los sectores de la sociedad, muestra de esto es la participación activa de las mujeres y las niñas en todos los programas de desarrollo del proceso de Informatización de la sociedad cubana y transformación digital, a tono con la Agenda 2030 y los Objetivos de Desarrollo Sostenible de la ONU entre los que se encuentran: Lograr la igualdad entre los géneros y empoderar a todas las mujeres y las niñas, este ODS que incluye entre sus metas: Mejorar el uso de la tecnología instrumental, en particular la tecnología de la información y las comunicaciones, para promover el empoderamiento de las mujeres.

Los Joven Club de Computación y Electrónica (JCCE) en lo adelante, Joven Club, son una red de centros tecnológicos inaugurados por Fidel Castro Ruz el 8 de septiembre de 1987

## POR UNA SOCIEDAD DIGITAL INCLUSIVA



con el objetivo de brindar servicios relacionados con las TIC a todos los sectores de la sociedad, permitiendo desarrollar habilidades y competencias digitales no solo en niños, adolescentes y jóvenes sino también en los adultos mayores. Desde su fundación ha graduado a más de 5 millones de cubanos en cursos relacionados con las TIC, de ellos 1 millones 973 mil son mujeres.

En los más de mil laboratorios de computación que tiene a lo largo y ancho de toda la isla ha acercado, desde edades tempranas, a las niñas a las tecnologías de la información y comunicación, promoviendo la formación vocacional y orientación profesional en este

campo, logrando reducir la brecha digital y alcanzando un mayor empoderamiento de nuestras mujeres.

En el 2018, gracias a una donación de la UNESCO, Joven Club empieza a incorporar la robótica educativa en sus planes de estudio, hoy cuenta con más de 23 laboratorios de robótica donde las niñas desarrollan su pensamiento lógico. Resolver problemas en equipo, proponer maneras más atractivas en las enseñanzas de matemática, la historia o la química y despertar el interés en disciplina como la ciencia de la computación son algunos motivos de la robótica educativa.

El proyecto de robótica educativa de Joven Club ha permitido que las niñas generen ambientes propicios hacia el trabajo integrado mediante procesos científicos tecnológicos, como crear y programar robots, algo imprescindible en el concepto de sociedad interconectada, sobre todo cuando hablamos de desarrollar el pensamiento lógico para el análisis y solución de diversas situaciones, un aprendizaje desde el conocimiento compartido. Persigue, además,

descubrir capacidades en cada persona a partir de la niñez mediante usos de juegos didácticos en temas básicos como la electrónica y la lógica de programación, esto les permite desarrollar un perfil vocacional con carreras de matemáticas, ingeniería como Biomédica, Telecomunicaciones, Automática a fin de fomentar estas en la sociedad.

Como parte de pre evento de la Sesión Especial de Capital Humano y Género en el marco de Informática 2024 el Ministerio de Comunicaciones de la República de Cuba junto a Joven Club lanzan el primer hackathon de género, el evento tuvo como objetivo elevar la formación vocacional y orientación profesional de nuestras niñas, adolescentes y jóvenes en materia de TIC, automática y electrónica, e incentivarlas a desarrollar sus capacidades, competencias tecnológicas y digitales, relacionadas con la robótica y la automatización, a través de la creación de robots capaces de resolver problemáticas o necesidades; fomentando en ellas el interés por la ciencia, tecnología e innovación aplicada.

Las participantes debían de realizar un desafío que consistía en crear un robot tipo insecto que se desplazara con patas, sus dimensiones no deberán rebasar los 20 cm de largo y ancho deberán ser electromecánicos y autónomos entre otros requisitos.

Participaron más de veinte niñas en la competencia resultado ganador el proyecto Vuelo al Futuro del Palacio Central de la Computación, centro con más de treinta años fomentando una cultura informática y digital en nuestras mujeres, con una gran experiencia en la robótica, electrónica y automática. El líder de este proyecto, Rolando Moitt Graham, con más de treinta años en el sector de la informática y la electrónica, se encarga de desarrollar las habilidades e incentivar en las niñas la pasión por estas materias, así lo muestran, Carla de la Puente Rodríguez, Evelyn Almaguer Garrido, Katheryn Glenda Alcántara Marlones ganadoras del primer Hackathon de género de robótica y premiadas en XIX Convención y Feria



Internacional Informática 2024. Es fundamental seguir trabajando para lograr una mayor igualdad en el acceso y uso de las TIC, seguir desarrollando las competencias digitales en las niñas para que ellas también formen parte de la sociedad digital.





**01ST - 04TH JULY 2024**  
ITU GLOBAL SYMPOSIUM FOR  
REGULATORS (GSR-24)  
**(KAMPALA, UGANDA)**

**07TH - 11TH JULY 2024**  
CANTO 2024 CONFERENCE  
**(MIAMI, FLORIDA)**

**08TH - 10TH JULY 2024**  
UWI FIVE ISLAND CAMPUS  
INAUGURAL ARTIFICIAL  
INTELLIGENCE CONFERENCE IN  
THE CARIBBEAN **(ANTIGUA AND  
BARBUDA)**

**12TH - 14TH AUGUST 2024**  
CARIBBEAN BROADCASTING  
UNION (CBU) ANNUAL GENERAL  
ASSEMBLY **(AGA) (BELIZE)**

**12TH - 16TH AUGUST 2024**  
SCHOOL OF DIGITAL  
TRANSFORMATION AND  
INNOVATION - CARIBBEAN  
VERSION **(TRINIDAD AND TOBAGO)**

**19TH - 23RD AUGUST 2024**  
OAS CITEL 45TH MEETING OF  
PCC.I  
TELECOMMUNICATIONS/ICT  
**(BRAZIL)**

**22ND - 27TH JULY 2024**  
ITU REGIONAL  
RADIOCOMMUNICATION  
SEMINAR **(GRENADA)**

**23RD - 27TH SEPTEMBER 2024**  
ITU'S REGIONAL CYBERDRILL  
2024 **(LIMA, PERU)**

**23RD - 27TH SEPTEMBER 2024**  
OAS CITEL 44TH MEETING OF  
PCC.II -  
RADIOCOMMUNICATIONS  
**(MEXICO)**



# IN THE K-NOW



## NEWSLETTER

### VISION OF CTU NETWORK OF WOMEN

To lead the charge in creating a strong community of Caribbean Women in ICT to drive profound and impactful transformation across the region. We envision women being equally represented and actively shaping the industry's future.

### MISSION OF THE CTU NETWORK OF WOMEN

Our mission is to cultivate a supportive and collaborative community that empowers and advances Caribbean Women in ICT and STEM. Through networking,

GET TO KNOW YOUR POINT OF CONTACT FOR THE CTU NOW: MS FRANCOLA JOHN, STAKEHOLDER ENGAGEMENT SPECIALIST AND CTU FOCAL POINT FOR ITU'S NETWORK OF WOMEN. TEL. NO.: 1-868-628-0281 EXT. 231; EMAIL: NOW@CTU.INT OR FRANCOLA.JOHN@CTU.INT

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mentoring and professional development opportunities, we strive to promote gender equality, equity and parity by amplifying women's voices, and driving positive change in the industry.

