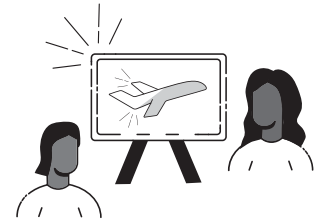# Building an minimum viable product with lean governance innovation design

June 2023 — Federico Vaz, PhD (Senior Lecturer, University of West London and MIT GOV/LAB Research Affiliate)

Abuja, Nigeria – September 2022 – January 2023.

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Summary

During a collaboration spanning from September 2022 to January 2023, an MIT GOV/LAB Designer-Researcher joined Nigeria's Presidential Enabling Business Environment Council (PEBEC) Secretariat (EBES) to pilot a design-led approach to co-identify and co-develop potential solutions to public issues called Lean Governance Innovation Design within the organization's remit. The collaboration involved two months of in-person work at PEBEC's Secretariat offices in Abuja, Nigeria, and remote work over three months jointly with a group of staff members from the Digital and Innovation Support Group (DISG) of Nigeria's Federal Inland Revenue Service (FIRS).

The team, internally known as the 'MIT10', worked closely to tackle the challenge of 'How to improve entrepreneurs' experience with FIRS?'

The result is a re-engineered tax registration process that unifies the Taxpayer Identification Numbers issued by the federal and state government levels and integrates other government agencies to validate personal and corporate IDs. By streamlining and harmonizing existing processes, the new process looks at both reducing the tax registration time and cost for entrepreneurs whilst increasing the government revenue net.

Lastly, this report offers a series of high-level recommendations in consideration of PEBEC-EBES's new stage in light of the new administration.

Collaborators: MIT Governance Lab; the Presidential Enabling Business Environment Council's Secretariat; the Federal Inland Revenue Service's Digital and Innovation Support Group.

Lean Governance Innovation Design

The LGID approach is based on four pillars, or corners, as we like to call them. Likewise, these are divided into what we call the Governance Triangle and the Enabling Environment triangle:

Governance Triangle:

/ **We want it:** all actors involved want the solution to a problem we share.

/ **We should build it:** we acknowledge the existing power dynamics and agree to a solution that is ethically aligned with all actors involved.

Enabling Environment Triangle:

/ **Local tech:** we have the capacity, resources, and technology locally available to develop and implement the solution.

/ **We sustain it:** we have the political and financial backing to enable and sustain the governance solution.

Likewise, the LGID program consists of six modules:

1. **Building a team:** activities to build relationships with the members of the design team.

2. **Identifying a real problem:** focus on the identification and validation of a problem shared by all relevant stakeholders.

3. **Getting and sustaining support:** activities aimed at identifying the existing power relationships within the ecosystem and bringing on board the actors who need to take a seat at the design table.

4. **Finding ideas worth testing:** ideation process and development of evaluation criteria that satisfy the requirements of all relevant actors and stakeholders.

5. **Testing ideas (pretotyping):** exploratory prototyping to quickly and cheaply decide whether the solution should be built.

6. **Getting to pilot - From v0.1 to v1.0:** development of a pilot implementation plan and a convincing narrative to pitch the solution to decision-makers.

To pilot this approach, an MIT GOV/LAB Designer-Researcher was sent to Abuja, Nigeria's capital, as part of the collaboration with the PEBEC Secretariat to work at the secretariat. There, our DR joined a group of six 'Reform Leaders' allocated to work on this collaboration, who called themselves "the MIT6". The team consisted of three career civil servants and three public sector consultants.

To accommodate the Reform Leaders' busy agendas, the work was planned based on three weekly working sessions with the 'MIT6'. However, the DR worked from EBES offices from Monday to Friday in order to fully embed in the local work dynamics See Figure 1).

Figure 1: Meeting at PEBEC-EBES office. Photo: Oke Oluwasegun / PEBEC[EBES]

During this time, the team implemented a series of tools and methods of the LGID approach and conducted several activities (see Figure 2), such as

/ Team building activities
- Creative rituals: establishing internal working norms;
- Write the headline of tomorrow – to set expectations and a shared vision;
- Expectations and preparation for collaboration;

/ Introduction to the six mindsets of design-driven public service innovation;

/ Introduction to the Lean Governance Innovation Design approach and Canvas;

/ Activities to move from problems to challenges (e.g., 'How Might We...');

/ Stakeholder mapping and power network (e.g., power/interest matrix);

/ First attempt at Obligatory Passage Point – to align objectives of different stakeholders;

/ First attempt at User Journey Map – to understand users' paint point with the current process and services;

/   Interviews with MDA's Reform Champions (seven)[1] ;

/   Focus groups with private sector actors in

         • Agribusiness (3 participants)

         • Tech (3 participants)

         • Light manufacturing (3 participants)

/   Survey design which was later converted into an interview guide;

/   In-depth interviews with private sector actors;

/   Planning of two workshops with private and public sector actors.

Figure 2: 'MIT6' team at PEBEC-EBES offices during a working session.

Originally, the collaboration meant the Designer-Researcher would stay in Abuja for three months (September to November 2022). However, after two months, the DR had to leave Nigeria due to a security warning[2]. For the remainder of the collaboration, the DR and the team worked online, holding meetings and working sessions over digital platforms such as Zoom and Miro (see Figure 3).
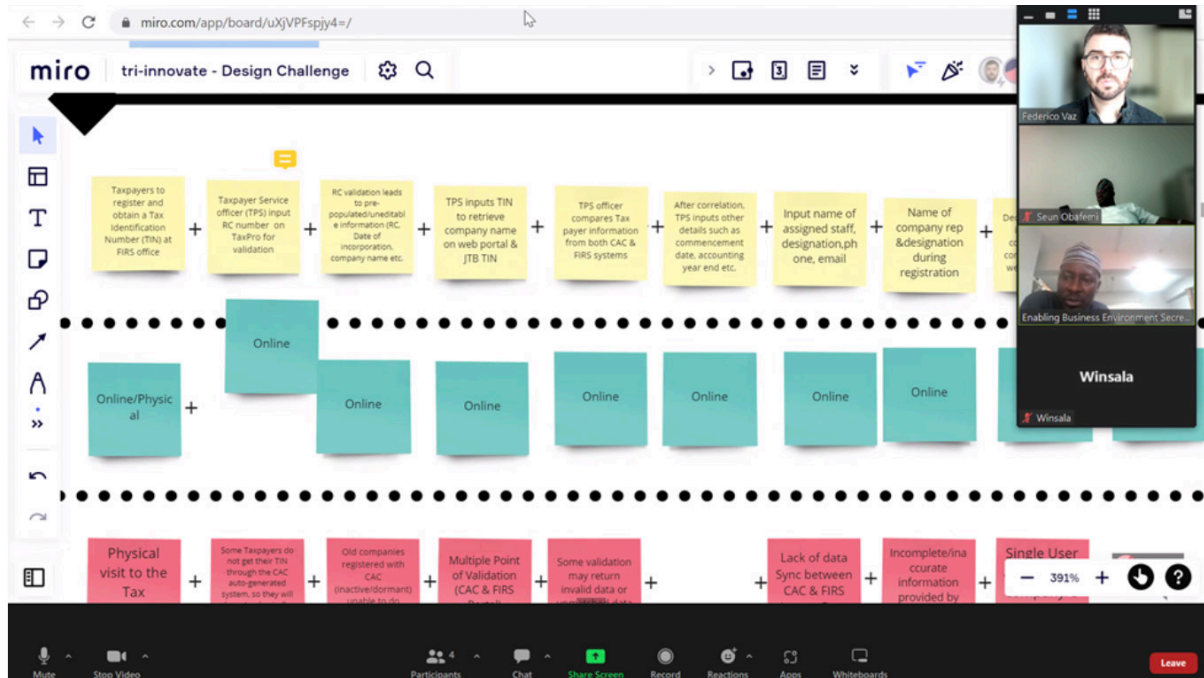
Figure 3: Online working session with 'MIT10' team, November 2022.

Unfortunately, some activities, such as an in-person co-design workshop with Federal Government officials in Abuja, and a co-design workshop with entrepreneurs and businesspeople in Lagos, had to be canceled last minute due to the DR's abrupt departure.

Right before the DR left Nigeria, and thanks to the insights from a series of interviews with local entrepreneurs, the MIT GOV/LAB team decided to change the dynamics and focus on the issues local micro, small and medium enterprises (MSMEs) face with Nigeria's Federal Inland Revenue Service (FIRS), a key actor in the business ecosystem. As part of this change, the PEBEC Secretariat and MIT GOV/LAB partnered with FIRS. This meant the 'MIT6' became the 'MIT10', after adding four FIRS members.

Moreover, to incentivize the new design team to deliver in a short time span, the GOV/LAB team decided to transform the implementation of LGID into a design challenge to answer the question, how might we enhance entrepreneurs' experience with FIRS?

With the new dynamics established, the two teams made up of three PEBEC-EBES 'Reform Leaders' and two FIRS 'Innovators' set out to outcompete each other by developing a solution that was then pitched to a panel of PEBEC Secretariat and FIRS authorities, and MIT GOV/LAB and MIT Solve experts[3].

Additionally, transforming the collaboration into a design challenge meant the role of the DR became that of a coach, guiding the teams as they developed their solutions. Likewise, working remotely implied adapting the activities and tools to be delivered online.

The Design Challenge

The design challenge was formally introduced on October 31st, at a meeting in The Hague, The Netherlands, as the 'MIT6' joined PEBEC-EBES Executive Secretary and other senior management team members to partake in the 2022 GovTech Summit.

During five weeks (see Figure 4), the teams worked towards weekly deliverables for which they received feedback to help them improve their designs (see Figure 5).
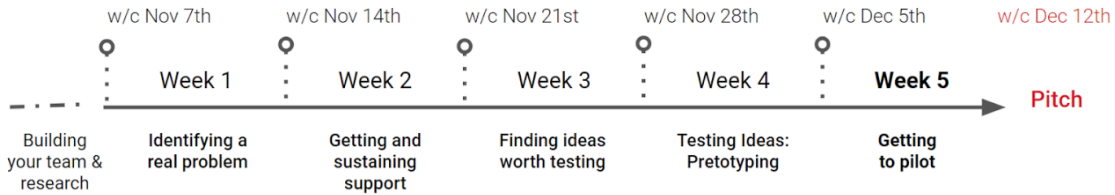

Figure 4: Design Challenge five-week timeline.

Likewise, each team had allocated time to meet with the DR and consult on specific aspects of their processes on top of the joint weekly briefing meetings, where the activities were presented.
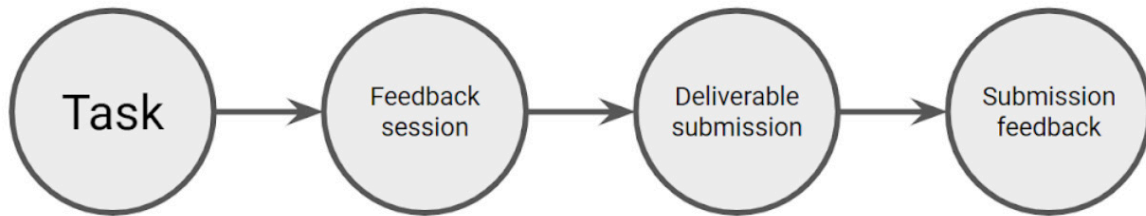

Figure 5: Design Challenge's weekly activities

Based on LGID's modules, the DR structured the work into a five-week Design Challenge with a number of corresponding activities.

Week 1 - Identifying a real problem

In the definition phase, the teams firstly created a shared knowledge base across all team members. Secondly, each team evaluated everything they learned to establish focus. This was done by defining specific contexts and desired outcomes of potential solutions. The phase concluded with the choice of a specific focus for their challenge, as well as goals and success metrics.

During this week, the teams were asked to complete three activities:

Stakeholders' interviews
Each team was to conduct a small number of interviews with users and other stakeholders (e.g., frontline staff) to gain insights regarding entrepreneurs' experiences with FIRS.

Journey mapping
Each team was to map the key touch points and pain points the users encounter when liaising with FIRS.

Problem Definition Worksheet (weekly deliverable)
Each team was asked to complete a Problem Definition Worksheet (see Figure 6).

Problem Definition Worksheet				
1. What is the problem you want to address?	2. Who does your problem affect and how?	3. What factors shape this problem and have the greatest impact?	4. What evidence do you have about this problem?	5. If we are successful, what is the change we will have brought about?
6. Now, rewrite your problem following the structure: We want to help [who] to understand/find a solution to/decide/learn (edit as appropriate) [what].				

Figure 6: Problem Definition Worksheet, Adapted from Nesta's Collective Intelligence Design Playbook (Peach, Berditchevskaia& Bass, 2019).

Week 2 - Getting and sustaining support

In this phase, the teams looked at identifying the existing power relationships within the actors affected by or related to the problem and bringing them on board to address the challenge. In particular, the teams were asked to

/ Understand how each stakeholder defines the problem;

/ Understand what is at stake for the stakeholders if this problem is to be confronted;
/ Identify hidden and potential alliances among the stakeholders based on how people define the problem;

/ Identify potential allies and partners - people who share similar perspectives with you on the problem;

/ Identify the minimum coalition that is necessary to start tackling the problem

During this week, the teams were asked to complete three activities:

Actor mapping

After brainstorming the actors/stakeholders in their problem definition, the teams were asked to map them according to their influence and support toward their objective (see Figure 6).
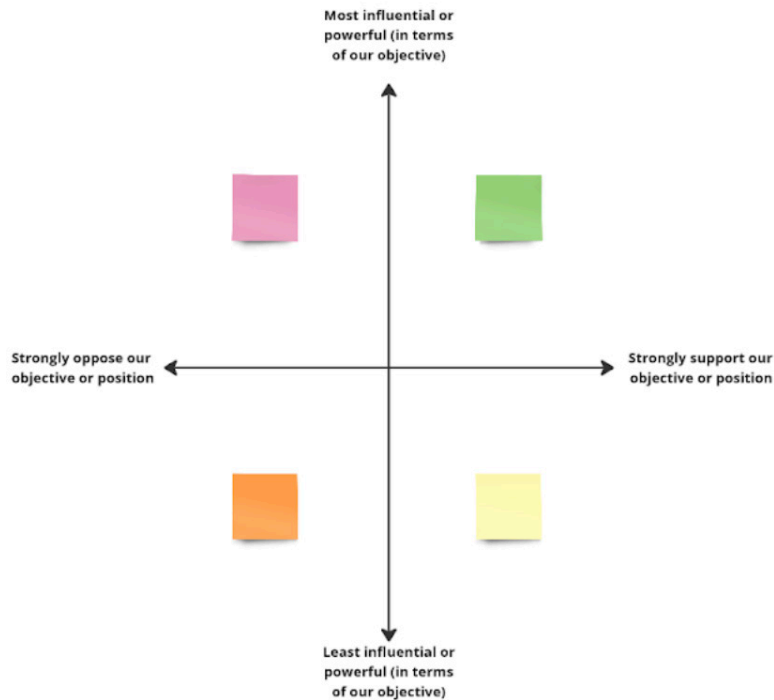

Figure 7: Stakeholder mapping according to their influence and support.

Authorizing environment

As the teams prepared to know what the conflicts around their challenge are and who might lose and who might gain power from potential solutions, they were asked to consider formal and informal authorizers. The teams then discussed what will need to be authorized for them to make progress or for a solution to be implemented:

/ Identify the primary authorizers - the people whose authorization is directly needed;

/ Identify needs beyond primary authorizers' scope;

/ Identify where additional authorization needs to come from;

/ Identify potential informal authorizers;

/ Identify which stakeholder aligned with your objective can connect you to or influence others whose authorization is required.

Shared problems (weekly deliverable)

Connect with each of the identified formal and informal authorizers and discuss the Problem Definition Worksheet:

/ Does the authorizer agree that we have a problem?

/ What would make the authorizer care more about the problem?

/ What would they need to be onboard to solve it?

With the above:

/ Refine the problem statement.

/ Discuss what are the obstacles to solving it.

/ Develop a new How Might We statement.

Week 3 - Finding ideas worth testing

In the ideation phase, the teams generated a broad range of ideas. To foster this process, the DR facilitated generative activities such as solutions in alternative spaces. Once each team had a pool of ideas, these narrowed them down to a single, well-articulated solution sketch.

During this week, the teams were asked to complete four activities:

6-3-5
Generative exercise where six people write down three ideas in five minutes.

How would Google do it?
Explore the defined problem space as if the solution was to be delivered by an organization that inspires the team. Each team was to select three organizations.

Idea filter - MoSCoW (deliverable)
Each team developed a set of 10 to 15 criteria to be used to filter ideas according to whether these were:

/ Must-haves: They represent non-negotiable needs for the project, product, or release in question;

/ Should-haves: They are essential to the product, project, or release but are not vital, and if left out, the solution still functions.

/ Could-haves: They are not necessary to the core function of the solution and be deprioritized.

/ Will not have: features that the solution will not include (at this time).

Idea selection (deliverable)
Lastly, each team was to sift their ideas through their filter and select one to move forward to the testing phase.

Week 4 – Testing ideas (pretotyping)

In this stage, the teams were asked to adopt an agile development mindset and learn how to test their ideas within a week and at the lowest possible cost. To do this, the teams developed exploratory prototypes or pretotypes, to test the demand and viability of their design solutions.

During this week, the teams were asked to complete three activities:

Elicit assumptions

The goal of this activity is to identify the known unknowns about the solution and determine how these affect the solution. Individually, each team member was asked to list the assumptions that their solution was based on (e.g., users prefer a mobile app rather than a web-browser-based solution). Then, these assumptions were shared with the team, discussed, and mapped on a double-entry matrix according to how strongly held these were and their importance to the solution's success.

Develop a pretotype criteria and plan (weekly deliverable)

The second activity consisted in developing a pretotyping plan by identifying:

/ What: What do we want to test? What do we want to learn?

/ Who: Who do we want to test it with?

/ How: How are we going to test it?

/ Success criteria: What needs to happen for the assumption to be validated?

The activity asked the teams to think about what assumptions they could test quickly, what materials, resources, time, location, people, and other elements they would need, and how they would learn from these tests.

Pretotype

Lastly, the teams were asked to attempt to test their assumptions through their pretotyping plan.

Week 5 – Getting to pilot

In this stage, the teams focused on telling a captivating story to capture the imagination of their stakeholders, authorizers, and the Design challenge's panel and bring them on a journey to build their proposed solution. To achieve this, each team developed a Pilot Plan to roll out the first real-world version of their solution.

During the Design Challenge's last week, the teams were asked to complete four activities:

Elements of a Pilot Plan (weekly deliverable)

To complete the week's first activity, the teams used a Pilot Plan worksheet (see Figure 8) that allowed them to quickly present to their stakeholders (and panel) that they knew how and what it would take to pilot the solution, should they receive the green light.

Target population	Cost	Buy in	Confidence
What's your pilot population? Geographically, number of people, politically (Municipal level? State level? Federal level?)	What will it cost to pilot your idea? How much of it would be reusable for the full rollout? How much is lost if the pilot is unsuccessful?	Who is on board, and who needs to get on board to pilot the idea? What do you need from them? What would you need to get them on board?	Are there any untested assumptions?

Figure 8: Pilot Plan worksheet.

LGID Canvas

Similarly, the LGID Canvas (see Figure 9) looked at synthesizing the core aspects of the proposed solution in a visually appealing way, as well as standardizing the two teams' outcomes to facilitate the panel's evaluation.

Figure 9: LGID Canvas.

Building a Great Pitch Deck

The third activity consisted in developing a visually appealing slide deck to pitch their solutions. For this, the DR created a template structuring the teams' presentations to allow the panel to clearly identify the proposals' value and assess them against the established criteria.

Oops, the Lights Went Out Again

Lastly, the teams were asked to rehearse their pitches with and without visual aid (see Figure 10).
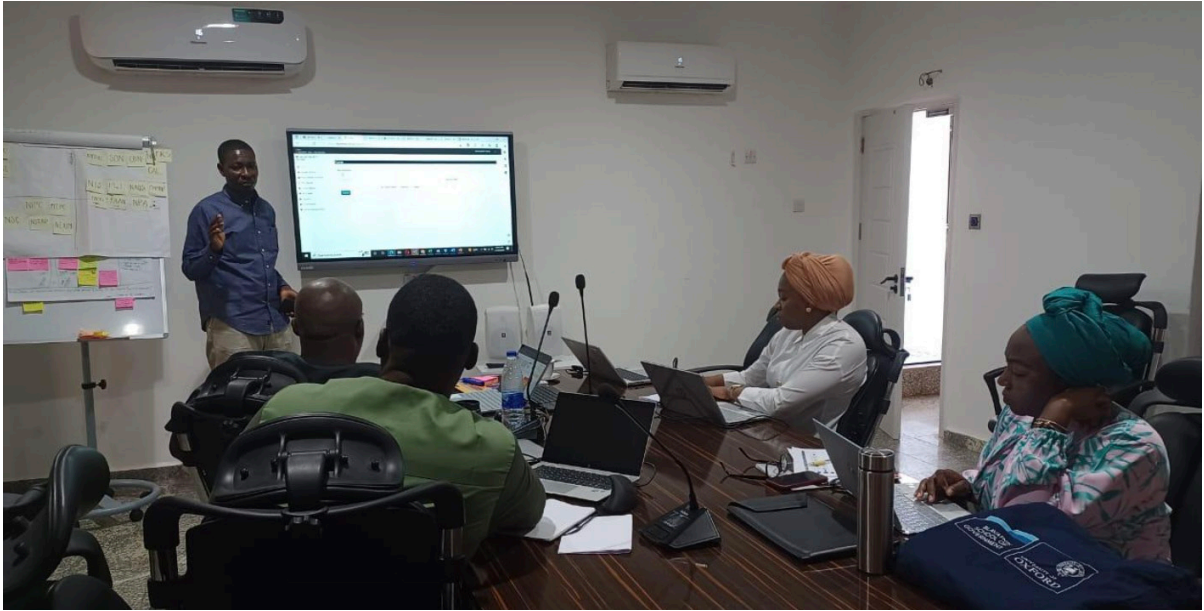
Figure 10: Internal team meeting preparing their solution pitch.

The Solution

On December 16th, 2022, the teams pitched their ideas to a panel consisting of

Dr Jumoke Oduwole, *Special Adviser to the President on Ease of Doing Business,* As Executive Secretary to the Presidential Enabling Business Environment Council (PEBEC), Dr Jumoke coordinates the activities of its secretariat with a mandate to make Nigeria a progressively easier place to do business.

Dr Dick Irri, *FIRS Coordinating Director, Compliance Support Group,* An experienced tax administrator, Dr Irri is a Fellow of the Association of National Accountants of Nigeria (FCNA), the Institute of Chartered Accountants of Nigeria (FCA), and the Chartered Institute of Taxation of Nigeria (FCTI).

Ms Opeoluwa Ashimi, *Solver at MIT Solve,* Ope, a healthcare professional passionate about the impact of digital solutions on Africa's entrepreneurial ecosystem, is founder and CEO of M'Care Compass.

Mr Eyitayo Ogunmola, *Solver at MIT Solve*, Founder of Utiva, Eyitayo was named a Global Good Fund Fellow in 2019, launched the Wunming Scholarship, and has been selected for Halcyon Incubator's program, Facebook Community Accelerator, and the Japan International Cooperation Agency Accelerator in 2020.

Mr Carlos Centeno, *MIT GOV/LAB Associate Director of Innovation*, Carlos works at the convergence of engineering design, technology, and political behavioral science to co-develop tech-enabled governance solutions with both governments and non-governmental partners.

The event took place online over two and a half hours. After deliberating, the panel selected 'OneTIN' as the Design Challenge winning proposal. This solution consists of a simplified tax registration process for MSMEs and individual taxpayers to obtain a unified Tax Identification Number (TIN) usable across all Nigerian Tax authorities.

The winning team explained that of the 2.5 million registered companies in Nigeria only 127,824 (6%) are registered with FIRS. Moreover, in 2022, only 15,274 of the registered companies (<12%) paid VAT. Amongst the main reasons for the low compliance and tax payment, the team identified

/ Cumbersome Tax registration process;

/ Multiple/fragmented Tax systems;

/ Inadequate taxpayer education at the Federal and State levels;

/ Most Micro, Small and Medium Scale Enterprises (MSMEs) are not registered with the Corporate Affairs Commission (CAC) and hence cannot be registered by Federal Inland Revenue Service (FIRS).

To overcome these limitations, the team proposed a solution that integrates the databases of the CAC and the National Identity Management Commission (NIMC) to validate the identity of new registered users in real-time while generating and assigning a unique TIN and pushing the new taxpayer's information to each and all relevant Tax Authorities at the Federal and State levels.

The panel's main concerns were about the cost of the solution, its sustainability considering the upcoming national elections (February 2023), and its uptake by the population. Other potential drawbacks, such as NIMC's willingness to open its databases, were also addressed.

After the pitch, both teams reunited to address the panel's concerns and worked together during January and February 2023 to refine the OneTIN solution. The DR followed the progress of the team who presented their refined solution to MIT GOV/LAB on February 10th, 2023.

The 'MIT10'[4] prepared to pitch their solution to the Vice President His Excellency the Honourable

References

1. To foster a more fluid and direct dialogue with the Ministries, Departments, and Agencies (MDA), and to facilitate the introduction of its reforms, PEBEC introduced the figure of the 'Reform Champion'. Selected by the Head of each MDA, Reform Champions act as the bridge between PEBEC and their respective MDA, providing an open communication channel with the MDA's hierarchies and ensuring the reforms respond to the issues targeted and their implementation is done smoothly.

2. Dzirutwe, MacDonald, and Wallis, Daniel. (2022). US and UK warn of possible attack in Nigeria's capital. Reuters. Online: https://www.reuters.com/world/africa/us-uk-warn-possible-attack-nigerias-capital-2022-10-23/

3. Solve is an initiative of the Massachusetts Institute of Technology that finds tech-based social entrepreneurs from around the world through open innovation challenges to drive innovation to solve world challenges: https://solve.mit.edu/about

4. The 'MIT10' are: Tolulope Abdul, PEBEC-EBES Operations Lead; Oluwaseun Winsala, PEBEC-EBES Reform Leader; Nkem Muoghalu, PEBEC-EBES Reform Leader; Olanrewaju Abolade, FIRS Program Manager; Halima Musa Usman, FIRS Assistant Director / Programme Management; Oluwaseun Obafemi, PEBEC-EBES Reform Leader; Olayombo Ade-Ojo, PEBEC-EBES Reform Leader; Mohammed Bawa, FIRS Lead Business Analyst / TaxPromax; Ifeanyi Francis-Shokoya, FIRS Head of Technical Assistance Team; Ifeanyi Icheke, PEBEC-EBES Reform Leader.