#### **Career Episode 3**

"Pipol Konek's Nationwide Launch: DICT's Drive for Free Public Wi-Fi in the Philippines"

### **INTRODUCTION**

3.1 This career episode delves into my significant involvement from 2017–2019 with the 'Pipol Konek' project. As a key member from Globe Telecom, I was at the forefront of executing and documenting this initiative by the Department of Information and Communications Technology (DICT). The project's mission was to provide Free Public Wi-Fi throughout the Philippines. My specific duties revolved around Aklan and Capiz, where I collaborated closely with DICT representatives. Although we faced obstacles in remote locations, our collaborative effort was fueled by a shared mission: to transform digital accessibility in the country and promote national progress by eliminating connectivity challenges.

#### **BACKGROUND**

- 3.2 Amid the rapid digital transformation, the Philippines saw an imperative need to bolster its digital infrastructure to cater to its growing population's evolving needs. In 2017, as a significant leap in this direction, the Department of Information and Communications Technology (DICT) launched the 'Pipol Konek' project. This ambitious initiative aimed to democratize internet access by providing Free Public Wi-Fi throughout the archipelago. The primary goal was to leverage internet access as an essential tool for education, business, and fostering enhanced communication between the government and its citizens.
- 3.3 My role in this transformative journey began as a personnel officer at from Globe Telecom, Inc., a telecommunications titan in the Philippines. Collaborating with DICT, I was entrusted with the crucial responsibility of ensuring the project's success in Aklan and Capiz provinces. It was here that the complexities of implementing a nationwide digital project truly came to light. From assessing the regions for optimal infrastructure placement to collaborating with local stakeholders for a smooth project rollout, every step was a blend of challenges and opportunities. Partnering closely with DICT personnel, I was involved in the hands-on implementation and in documenting the progress and hurdles, ensuring that every lesson learned would serve as a stepping stone for future expansions. As we ventured into distant and often challenging terrains, our shared goal remained steadfast: to eliminate digital divides and catalyze national growth.

# PERSONAL TECHNOLOGIST ACTIVITY

# 3.4 Preliminary Assessment

 At the outset, I delved into a rigorous evaluation of municipalities in Aklan and Capiz. Places like Kalibo, Altavas, Balete, Banga, Batan, Buruanga, Ibajay, Kalibo, Lezo, and Madalag caught my attention in Aklan, while in Capiz, Pilar, Maayon, and Pontevedra stood out. My aim during this phase was to grasp the geographical and infrastructural nuances of these locales. I intended to pinpoint potential connectivity routes and shortlist the best sites for infrastructure.

# 3.5 Collaborative Planning

 With a comprehensive understanding of the areas, I engaged with DICT representatives to chart out a robust plan. Our blueprint accounted for existing poles, their proximity to Globe network nodes, and the region's unique geographical challenges. My constant coordination with Globe project managers was crucial here. They leaned on my ground-level expertise, especially when we discussed the optimal medium or the best fiber route from node to client.

### 3.6 Connectivity Decision

 Having gathered insights from my initial survey, I made pivotal decisions on the connectivity medium. In towns where poles connected to Globe network nodes, I championed the use of fiber optic cables, anticipating their promise of robust, high-speed connectivity. However, for those challenging mountainous terrains with nodes, I pivoted to microwave radio. It was a solution tailored for such landscapes. Figure 1 depicts two examples of low-level design (LLD), one using microwave radio and the other fiber optic cable.

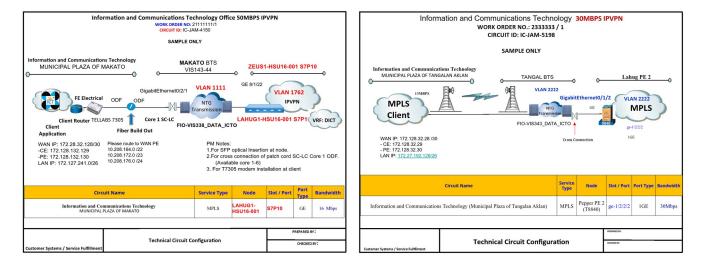


Figure 1. Examples of low-level design (LLD) using microwave radio and fiber optics

#### 3.7 Infrastructure Development

• In my role, I was at the forefront of the infrastructure setup, sometimes undertaking journeys of up to 4 hours just to reach Globe's node. These travels were not merely limited to driving; they often included strenuous hiking segments. Once on site, I closely supervised the medium installation carried out by third-party contractors, offering guidance as necessary. My hands-on tasks primarily involved patching—this meant connecting fibres from designated access ports to the Fibre Distribution Unit (FDU) or configuring Ethernet cables between the access node and the microwave radio in-door unit's Gigabit Ethernet (GE) port. All these tasks were performed in strict adherence to the project manager's facility implementation order (FIO) and the specified low-level design.

# 3.8 Technical Support and Training

 Beyond establishing the infrastructure, I realized the importance of empowering the local stakeholders. I organized and led training sessions, ensuring they had the skills to manage and troubleshoot the connectivity setups.

# 3.9 Deployment

 With everything in place, I spearheaded the deployment phase. I painstakingly activated each Wi-Fi zone and coordinated the installation of specific modems, all based on the project manager's low-level design.

# 3.10 Continuous Monitoring and Maintenance

• In the ever-evolving realm of connectivity, I prioritized continuous monitoring. Every connection, from fiber optics in towns to microwave setups in hilly areas, came under my watchful eye. At the slightest hint of a disruption, I mobilized Globe Telecom's maintenance teams to ensure swift remediation. In figure 2, using vendor software, I performed maintenance by checking its parameters to ensure that the device was performing optimally.

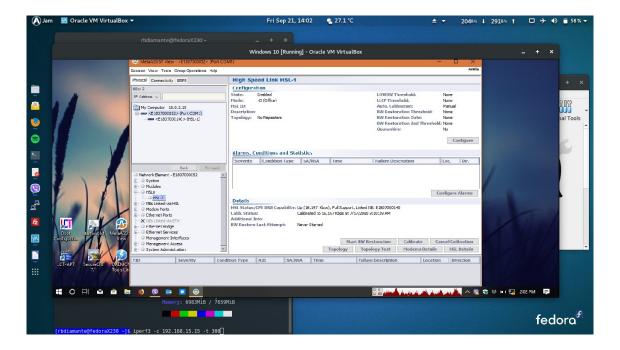


Figure 2. A vendor's software to check device parameters

### 3.11 Documentation and Reporting

• Documenting our journey was a task I undertook with meticulous precision. Since Globe is subscribed to the Google platform, I had the privilege of unlimited storage, a benefit I harnessed to preserve my comprehensive files. To streamline data, I turned to Google Sheets, further integrating this data source with Appsheet for enhanced usability. Every decision, impediment, and triumph was methodically captured. A tangible example of this integration is displayed in Figure 3, where data imported into Google Sheets is utilized as a primary data source on AppSheet, showcasing the potential of the no-code development platform AppSheet in facilitating the creation of both mobile and web applications.

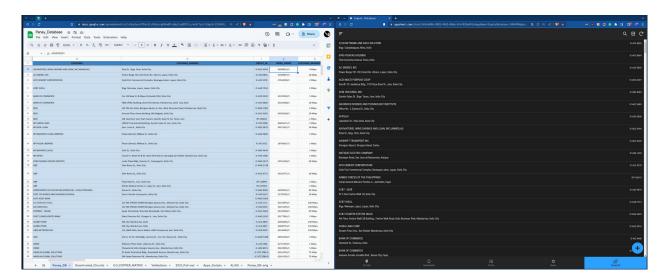


Figure 3. Google Sheets is on the left, and AppSheet is on the right.

• An essential component of this project was ensuring transparency with our partners. Iperf testing was conducted to measure internet bandwidth speeds, with the results meticulously showcased to DICT personnel during both the pre-assessment and final assessment stages, establishing clarity and trust. This pivotal testing process is illustrated in Figure 4. Additionally, to cement our mutual understanding and agreement on the progress and outcomes of our collaboration, an acceptance form was drawn up. This form, signed by both parties present during the testing, symbolized our shared commitment to the project's goals and milestones.

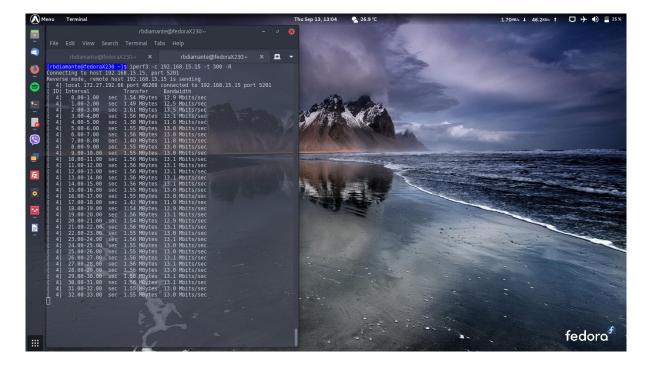


Figure 4. iPerf testing was performed on one of the clients

### 3.12 Collaboration and Stakeholder Engagement

 This journey taught me the value of collaboration. I actively engaged with various stakeholders, ensuring our project resonated with local needs and realities. Their insights were invaluable, guiding our collective efforts towards success.

### 3.13 Overcoming Geographical Challenges

- Navigating diverse terrain was an adventure. Some locales, with their mountainous terrain
  and distant nodes, posed considerable challenges. But with the strategic deployment of
  microwave radios and a dash of determination, I ensured that no area, no matter its
  geographical constraints, was left behind in our quest for digital connectivity.
- The evolution from the initial stages of the 'Pipol Konek' project to its triumphant deployment in Aklan and Capiz showcases a combination of team effort, meticulous planning, and relentless commitment. Through the united efforts of DICT, Globe Telecom, and other key players, we've set the Philippines on a path of digital transformation and empowerment.

#### **SUMMARY**

3.14 From 2017 to 2019, within Globe Telecom, Inc., I took a leading role in the 'Pipol Konek' initiative in partnership with DICT. This initiative sought to spread Free Public Wi-Fi throughout the Philippines, with an emphasis on regions such as Aklan and Capiz. My collaboration with DICT was instrumental in addressing the unique challenges of these areas by leveraging fibre optics in urban settings and turning to microwave radios in more challenging terrain. Beyond just the infrastructure setup, I spearheaded local training sessions and ensured uninterrupted network service. Our combined efforts significantly propelled the digital transformation of the Philippines forwards.