

# Palau Foreign Investment Board Executive Summary



Student Consultant - Maksym Kornyev Development Partner - Cameron Van Tassell

# I. About the Organization

The Foreign Investment Board (FIB) works to tailor a long-term vision for the future of Palau. By enabling legitimized investment and combatting feigned compliance, the organization ensures that foreign investment in Palau truly works for Palau.

The FIB is an office under the Executive branch of Palau's government. It is located in the city of Meyungs, and is in close proximity to Koror, the country's largest city. The organization is relatively small, with an annual budget of roughly \$217,000 in 2019, and five (soon four) full-time employees. Its main function is to vet incoming foreign investment in Palau, and ensure that already established foreign-owned enterprises are operating within a well-defined and legal scope. The FIB's taskforce advises the presidentially appointed and senate approved board, which has the final word in approving investment applications and levying punitive fines. The regulatory environment in Palau is not ideal, in that it is difficult for other regulatory agencies to pool resources with the organization. And, the FIB's most pressing issues are operational, stemming from a plethora of paper records which are difficult to access and track for internal use. The prospect of economic growth, as well as operational deficiencies in the republic's regulatory environment, only heighten the need for impactful internal improvements within the FIB.

# II. Goal 1: Transition to a Paperless Filing System

Paperless record management via the use of a Document Management System (DMS) is an information management alternative which provides an easily accessible platform for digital file storage. Industry standard DMS features are able to complement the FIB's process flow, provide a means of uniform institutional memory, and aid in the easy lookup and management of documents. A cloud-based service would be able to offer data retention capabilities necessary for high priority documents. In totality, a DMS will cut down on the labor required to organize, share, and update internal data. Most notably, this system will have an impact on Quarterly Report submissions, internal investigations, and the entire Foreign Investment Approval Certificate (FIAC) process.

Outputs for the goal include the purchase and installation of Box, a cloud-based DMS, and its integration with a custom-built submission portal (read more at Goal 2) built on top of the Box API. The staff were given individual walkthroughs of key Box features pertaining to the intake, management, and mandated circulation of filings. Thorough documentation of these basic features and their application to the FIB process flow was created. Along with these, other maintenance-related help documents were shared with the staff on the Box platform. Additional infrastructure changes were made, including the installation of new scanner software and the upgrade of existing Microsoft Office tools. A minor record room reorganization also took place.

A risk to the goal's sustainability is the delayed adoption of the Box software. The scanning of all non-digitized documents is a limiting factor, and will require the staff to refer to the original copies of older files. This process has already proved to be lengthier than expected, and will prolong the FIB's transition while limiting the staff's exposure to the Box platform.

Recommendations regarding the transition of hard-copy documents include outsourcing the scanning of the files. The manual labor required to, both, organize previously filed applications and properly import them into the Box platform is quite intensive. Hiring an external party to do so will not only speed up the rate of transition, but allow the organization to safely purge backed-up and nonessential documents. The staff will also benefit from the additional exposure to the use of Box.

# III. Goal 2: Submission Portal and Website Deployment

Enabling the digital submission of FIAC applications and Quarterly Reports will actively reduce the internal workload associated with their processing. A typical investor will often have to liaison with the FIB to obtain hard copies of required application forms, report forms, and other investor resources. Providing a majority of these documents online, as well as comprehensive directions regarding the filing process, will contribute to the transparency of the entire system. The derived benefit to new and current investors will be significant. Further, retaining these document submissions digitally will ensure a speedy transition to paperless. This point is especially pertinent when considering the additional submission volume generated by new quarterly report regulations.

Outputs for the goal include the development of a client-facing resource and submission portal: A static website with some light JavaScript was deemed to best meet the project constraints. For security, a permissioned upload token allowed users to make throttled uploads to the Box system. A domain was purchased, and the website was deployed to the AWS S3 hosting service in late July. The staff were also actively included throughout the design process, and contributed to developing a directory structure for new uploads, as well as the final content layout of the website.

July's budget freeze postponed the purchase of an allotted internet upgrade. Although this infrastructure adjustment can be delayed to a later point in time, the withdrawal of this funding poses a risk to the payment of future monthly hosting fees for the FIB's submission portal. This risk is, unfortunately, inevitable. But, the online resources can always be rolled back to a free hosting alternative at a <u>substitute domain</u>. The threat can also be alleviated at the start of the next fiscal year, when all expenses can be officially budgeted.

**Consulting Partner** 

Cameron Van Tassell cgvantassell@gmail.com

Meyungs, Republic of Palau www.fibpalau.com

Foreign Investment Board

### **About the Consultant**

Maksym Kornyev *mkornyev@gmail.com* 

Max is a Junior in the Information Systems program. During his next internship, he hopes to do work at the intersection of Software Engineering and Design.

## IV. Additional Recommendations

It is recommended that the aforementioned internet upgrade be made at the earliest convenience, or as soon as the budget allows it. A 1Mbps internet speed is not representative of other proximate regulatory offices, and may slightly impair the loading times of documents on the Box platform. This upgrade will require minimal effort from the staff, and has already been discussed with the Executive Director and office Administrator.



# Palau Foreign Investment Board Final Consulting Report



Student Consultant - Maksym Kornyev Development Partner - Cameron Van Tassell

# I. About the Organization

The Foreign Investment Board (FIB) works to tailor a long-term vision for the future of Palau. By enabling legitimized investment and combatting feigned compliance, the organization ensures that foreign investment in Palau truly works for Palau.

This goal is pursuant to the conditions laid out in the <u>Foreign Investment Act</u> (FIA) §104, which charters the FIB and its mainly regulatory function.

# **Organization**

The FIB is an office under the Executive branch of Palau's government. It is located in the city of Meyungs, and is in close proximity to Koror, the country's largest city. The organization is relatively small, with an annual budget of roughly \$217,000 in 2019, and five (soon four) full-time employees. Its main function is to vet incoming foreign investment in Palau, and ensure that already established foreign-owned enterprises are operating within a well-defined and legal scope. The FIB's taskforce advises the presidentially appointed and senate approved board, which has the final word in approving investment applications and levying punitive fines. The regulatory environment in Palau is not ideal, in that it is difficult for other regulatory agencies to pool resources with the organization. And, the FIB's most pressing issues are operational, stemming from a plethora of paper records which are difficult to access and track for internal use. The prospect of economic growth, as well as operational deficiencies in the republic's regulatory environment, only heighten the need for impactful internal improvements within the FIB.

#### **Facilities**

The FIB is housed in a small satellite office adjacent to and accessible through the Office of the President. It consists of a reception office (housing the director and administrative officer), a back office (housing the administrative assistant and investigators), a conference room (used for weekly board meetings, quarterly staff meetings, and as a break room), and a record storage room managed by the administrative assistant.

The space is climate controlled and well lit. It is not absolutely secure, given three adjacent entrances to the space as well as an unlocked record room. All windows to the FIB offices, apart from one window in the record room, are barred. The congestion of the space enables face-to-face

communication and easy wiring, while posing serious organizational issues when it comes to record storage in the long term.

Power outages are sparse, but will happen every few months in the event of a tropical storm. And, although the office has some nonfunctional outlets and a poor internet speed (1Mbps), there are no grave infrastructure shortcomings.

## **Programs**

The FIB processes *Foreign Investment Approval Certificate* (FIAC) applications on a rolling basis. These applications are the main entry point for FDI in Palau, and are an important resource for the FIB's investigators. After approval, applications are filed along with any available correspondence, and later utilized by the FIB's investigators. Most importantly, these filings define the "scope" of foreign investments and aid the FIB's staff in enforcing compliance.

## Sample FIAC Filing:

- 1. \*FIAC Certificate/\*Amendments
- 2. FIAC Application
- 3. \*Correspondence (Emails/Scans/Images)
- 4. Corporate Charter
- 5. Articles
- 6. Bylaws
- 7. Stock Affidavit
- 8. Shareholder Profiles (CV's, \*\*Police Clearance, \*\*Joint Account Info)
- 9. Lease Agreement
- \* Addendums which are added internally to the original FIAC submission
- \*\* Addendums received by mail to the FIB's PO Box

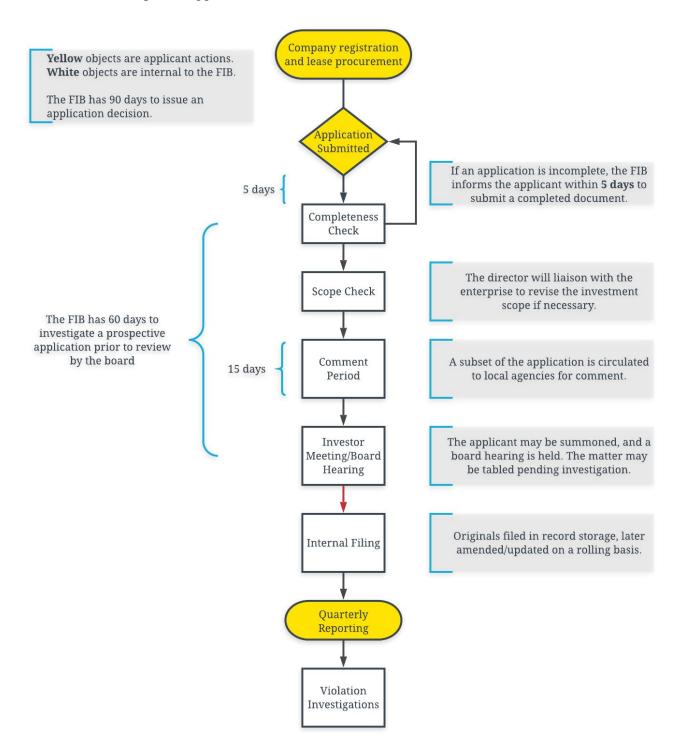
Filings are received anywhere from 1-2 times a month, with decisions normally being issued in 30 days. A typical filing ranges anywhere from about 50 to 200+ pages, and is submitted (along with 15 additional paper copies) by the applicant. Applications are often stapled, comb bound, or soft-cover documents. Subsets of applications, like financial documents, may also be submitted as separate corporate booklets.

Aside from the filings themselves, an Excel sheet of approved applications and a master paper record of approved, denied, and expired applications is kept. The FIB will respond to information requests from local and foreign agencies, often drawing simple demography statistics from the Excel record.

FIAC holders are required to submit paper copies of *Quarterly Reports* to the FIB, providing current employee, license, and tax information. These applications are required to be submitted at least once per annum, while additional reports are needed quarterly if the original submission that calendar

year becomes deprecated. Keeping the most current record of FIAC filings (as well as their addendums), and reviewing updated documents is critical to FIB investigations.

## Process Flow Diagram, Appendix D:



The FIB may carry out Violation Investigations on suspect enterprises, and issue citations following board review. Typical compliance investigations are resource heavy, have an indefinite timeline, and entail the following functions:

- Conducting field work to verify that all development is legal & scope-adhering
- Ensuring worker fee receipts are consistent with internal records
  - o Total fees per foreign worker must equal total Ministry of Finance receipts
- Keeping a filed record of ongoing investigations
- Requesting additional resources from government agencies or the enterprise itself
- Gathering of Tax office/Registrar records
- Review of charters and affidavits to determine & link underlying ownership
- Review of specific employee & owner movement/work histories
- Reporting of infractions to the board
- Issuance of fines, and the tracking of their payment deadlines

The FIB's investigators are tapped, both internally and externally, to enforce enterprise compliance. Investigators find themselves making additional copies of significant subsets of FIAC filings in order to carry out investigations and gain organizational context. Other challenges stem from the tracking of investigation statuses and fine deadlines (which have been lost track of in the past). One investigator employs a google calendar to track investigatory interactions. Computers are used sparingly to carry out research and correspondence.

#### Staff

The organization is made up of 5 core staff members. They have basic technical training, as well as rudimentary knowledge of Microsoft Office tools used on a daily basis.

Cameron Van Tassell, Executive Director:

Primary functions include reviewing the scope of incoming applications, and advising the board on the status of those applications. Currently doubling as a legal advisor, the director provides additional interpretations of documents to the board. Although most correspondence is handled by the administrative officer, the director may liaison with stakeholders directly to alter scopes of work and guide them through the application process. This individual also handles the FIB's annual budget. Cameron is leaving the position later in 2019.

Margie Bechab, Administrative Officer:

The administrative officer handles the majority of phone and mail correspondence with applicants, and keeps a paper record of paid administrative fees. The officer will make applicants aware of

certain requirements, additional board meetings, and the status of their FIAC's. In addition to this, the officer will document meeting minutes, and carry out a completeness check (ie. license presence and freshness) for each submitted application before forwarding it to the director for review. Marge is the FIB's longest tenured employee, and may provide additional applicant assistance / holistic assessments of these applications if needed.

### Cassa Leah Masayuki, Administrative Assistant:

The administrative assistant manages the record storage room, and maintains an Excel and a master paper register of all applications. If updates to an application are made or additional attachments to an application are received, this individual is responsible for updating the originally filed records. FIAC holders retain their investment approvals for up to 50 years, so each filing must be readily accessible and retrievable by this individual. Leah will also work with applicants one-on-one and guide them through the application process when needed.

## Ellison Ellis and Jolanda Warren, Criminal Investigators:

The investigators are mostly autonomous, and carry out inquiries as detailed in the "Programs" section above. At times, these individuals may present their findings to the board, as well as liaison with foreign enterprises directly. They employ a standard Excel checklist for basic FIAC infractions, which is prepared for the board upon request. Ellison has a legal background, and often works with corporate documents. While Jolanda comes from a customs background, and uses an excel sheet to track fee discrepancies between received Ministry of Finance receipts and internal record / findings.

# **Technology Infrastructure**

The organization's technology infrastructure is minimal, and consists of a small network of computers. The current hardware is slightly temperamental. An investigator's ThinkPad, which experiences unexpected shutdowns, is now being replaced with a desktop. An exhaustive list of hardware is detailed below:

4 Desktop Computers (all Ethernet), 1 Laptop:

- Dell OptiPlex 780, 3040 (Using a WiFi adapter), 7050, and 7020
- Lenovo ThinkCentre TIO22Gen3 All-in-One
- Lenovo ThinkPad (Prone to malfunction)

OS:

• Windows 10, Win 7 (Only on the OptiPlex 780)

#### Peripherals:

- Canon iRunner 2525 (Commercial copier, requires an expensive chip for scanning)
- Brother FAX-575 Personal Plain Paper Faxer
- HP Deskjet 3630 Printer/Scanner (Can handle scans one page at a time)
- HP Deskjet 1010 Printer

• IBM Wheelwriter 1000 (Typewriter, used to markup original bank statements)

#### Network:

- ZYXEL SBG5500-A Small Business Gateway
- D-Link DSS-8+ (Ethernet Switch)
- ASUS RT-N12 Router

# **Technology Management**

Technology management and planning is sparse at the FIB. In the past, the office has referred to external contractors when purchasing additional equipment and troubleshooting issues. These include Jezrrae & WCTC (local retailers), and PNCC (the FIB's current ISP).

There is no technical contact for office-level tech issues. But, there are two contacts under the Information System Support Services Bureau who handle network-level issues for the Ministry of Finance. Finally, there are no antivirus or data backup protocols, given that the organization is working with an entirely paper-based filing system.

# **Technology Planning**

The FIB has made no attempt at technology planning or budgeting, and new hardware is acquired on a need-basis. The current budget has no technological allowance, but is subject to future change according to the executive director. A current budget surplus from the last fiscal cycle provides some wiggle room for future development.

#### Communication

The staff shares internal documents by making photocopies or sending emails. The staff's email accounts double as personal addresses, while a shared email address is utilized for additional external communications. Mail correspondence is only used for disseminating Quarterly Report forms to FIAC holders.

The organization has passable access to the internet: download and upload speeds at the FIB office fluctuate between .3 to .9 Mbps (at 1Mbps with the PNCC internet service provider). Online resources are now available to new investors at <a href="fibpalau.com">fibpalau.com</a>.

The only internally managed contacts are kept in a master paper binder of approved and denied FIAC holders, as well as an excel sheet of applicant information. Information is often redundant and prone to error during manual entry, with fee records, investigation information, and original filings being stored in three different places. This results in a longer time horizon when it comes to producing all the relevant information on a single enterprise.

# **Information Management**

Technologically information management is minimal at the FIB. Records are kept in both paper and digital format. Internally, the staff keeps a chronological record of select paid fees (Application

Filing, Foreign Worker, Amendment, Quarterly Filing, Xerox, or Other). Foreign worker fees, for instance, are recurring and make keeping a running excel record of payments tedious. Fee deadlines are noted in these excel sheets, which can easily get out of hand and be forgotten. It is not that uncommon to see post-it notes with staff comments in the original FIAC filings and internal applicant records.

# **Business Systems**

The FIB's business systems are largely paper-based. Payroll timesheets are paper documents which are completed biweekly, then forwarded to the Personnel Office. While annual budgets (prepared each March) are digital, and forwarded to the Budget Office. Additional correspondence with the president's office, often providing operational statistics, is also paper-based and filed sparingly.

Any automation of these processes will have external consequences, and will require additional coordination with any respective administrative offices.

# II. Goal 1: Transition to a Paperless Filing System Motivation

Paperless record management via the use of a Document Management System (DMS) is an information management alternative which provides an easily accessible platform for digital file storage. Industry standard DMS features are able to complement the FIB's process flow, provide a means of uniform institutional memory, and aid in the easy lookup and management of documents. A cloud-based service would be able to offer data retention capabilities necessary for high priority documents. In totality, a DMS will cut down on the labor required to organize, share, and update internal data. Most notably, this system will have an impact on Quarterly Report submissions, internal investigations, and the entire Foreign Investment Approval Certificate (FIAC) process.

#### **Outcomes**

Outputs for the goal include the purchase and installation of <u>Box</u>, a cloud-based DMS, and its integration with a custom-built submission portal (<u>read more at Goal 2</u>) built on top of the Box API. After a requirement gathering phase and several staff interviews, a matrix of A and B level DMS features was generated. Then, a short quote gathering period helped identify some candidate systems. Those that most closely matched the feature matrix were selected, and a shortlist, as well as the consultant's recommendation, were forwarded to the executive director for review (see Appendix C). The final purchase was well within budget.

Throughout the following weeks, user stories were generated (Appendix F), and the staff were given individual walkthroughs of those key Box features. The staff also received a small crash course on Excel formulas. Additional infrastructure changes were made, including the installation of the Box software, a new scanner software, and the upgrade of existing Microsoft Office tools. And, the Denied application section of the record room was reorganized, enabling the office to begin to scan

and purge redundant filings. Due to their high priority, FIAC Certificates #451-625, as well as some Denied applications, were imported to the Box system. This process has proved to be a limiting factor, given the length of time required to organize filings, and scan them by hand. It also limits the Box use-case for investigators, who consistently have to refer to archived documents.

The Box platform needed little configuration (as it is a browser-based cloud service), and can be managed completely from the Box administrator account (assigned to the office administrator). Submission Portal management (only for developers) can also be accessed from this account. Finally, the Box offline extension varies based by Operating System, with *Box Drive* being compatible with only on the newest versions of Windows (Appendix F, item i).

#### Recommendations

The FIB must urge all new investors to utilize the online submission portal immediately, so that all new rounds of applications can be maintained in digital copy. The fairly low volume of applications should make the transition for the administrative staff a gradual one. The labor and time savings from digitally disseminating application copies to seven local agencies will also be an appealing benefit.

The transition of hard-copy documents can be motivated by outsourcing the scanning and importing of the files (Appendix H). Hiring an external party to do so will not only speed up the rate of transition, but allow the organization to safely purge backed-up and nonessential filings. The process is laborious, given the heterogeneity of stapled, comb bound, and loose application materials. Upon completion of this, the investigator staff will no longer need to maintain their own investigation-related copies of original filings.

An internet upgrade has been discussed with the staff, and should be reconsidered in March at the start of the next fiscal year (given budget constraints). Switching service to Palau Telecoms at 4Mbps can significantly improve the loading time of Box documents.

# III. Goal 2: Submission Portal and Website Deployment Motivation

Enabling the digital submission of FIAC applications and Quarterly Reports will actively reduce the internal workload associated with their processing. A typical investor will have to actively liaison with the FIB to obtain hard copies of required application forms, report forms, and other investor resources. Providing a majority of these documents online, as well as comprehensive directions regarding the filing process, will contribute to the transparency of the entire system. The derived benefit to new and current investors will also be significant. Further, retaining these document submissions digitally will ensure a speedy transition to paperless. This point is especially pertinent when considering the additional submission volume generated by new quarterly report regulations.

#### **Outcomes**

Several project constraints were enumerated, and were also considered during the Goal 1 exploratory phase. Special attention was paid to how candidate system API's were documented, what

authorization features they provided, and how file uploads were accommodated. After the Box platform was selected, a Web Application with lightweight JavaScript was built on top of it. A domain name was purchased on Amazon's Route 53, and the project was deployed to Amazon S3 (Appendix A).

The staff were consulted heavily, and helped create comprehensive resource pages for new and current investors. They were also welcomed to weigh in on the template directory structure for application and quarterly report submissions. The administrative assistant received training in website maintenance (Appendix G), and PDF tools necessary to create new application forms for the website.

With FIB resources now deployed online, the staff was able to refer inquiring callers to the website several times a week. A savings of 7 reams of paper annually, plus associated postage savings, from the discontinued mailing of resources to 218 active FIAC holders can start to be realized as report submissions for Q4 begin to roll in. Website deployment took place between quarters, so only one quarterly report submission was observed. Finally, when new applications are submitted in the coming months, a 50% reduction in paper-based submissions can be seen as the office begins to circulate these filings digitally.

The submission portal is configured to use a permissioned upload token, which allows users to make uploads to the Box system. As a safeguard, uploads have a hard-coded throttle limit (in the Box API). Upload exceptions are handled appropriately with feedback prompts, which alert the user of any errors during the upload process and redirect clients appropriately.

#### Recommendations

The application is relatively safe, but it is recommended that the student consultant is made aware of any interruptions to service (whether caused by an internal mishap or not). Box has already been configured with permission settings that accommodate uploads to the system, and it is not recommended that any changes be made to these Developer Console options.

It is recommended, in the case of a withdrawal of funding, that the FIB begin directing investors to the <u>fallback domain</u>. It is the original version of the Box portal, and is deploy ready. The only drawback of the domain being an illegitimate name address, and a bandwidth limit (which should be negligible in the short term given the current volume of applications). Further, Amazon domain and hosting charges (as well as any additional Box fees) should be officially budgeted next March, as to avoid this situation.

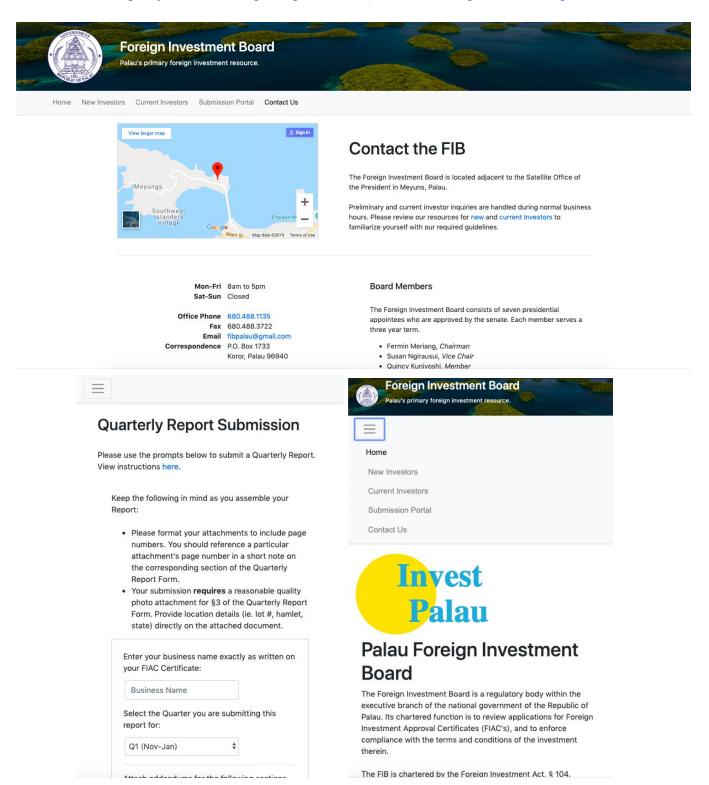
### **About the Consultant**

Max is a Junior in the Information Systems program at Carnegie Mellon University. He plans to pursue a minor in Software Engineering in the coming semester. Having satisfied his consulting ambitions this summer, he wishes to learn more about the fields of design, software engineering, and webapp security in the future.

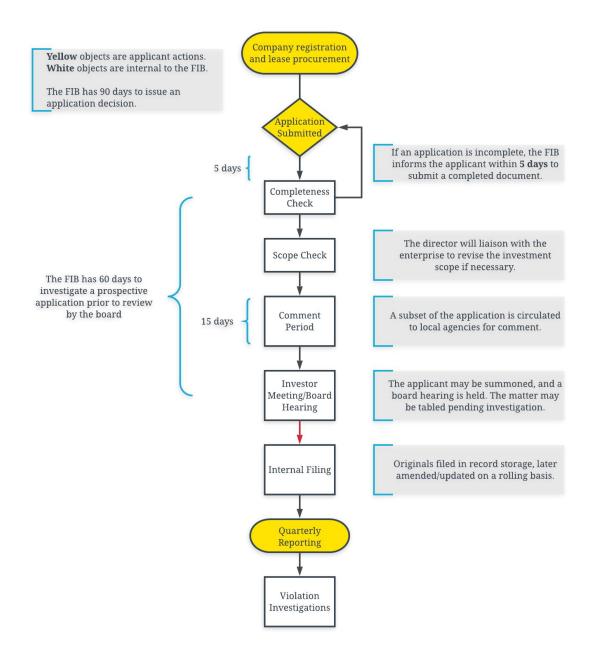
After his time in Palau, Max gained a better understanding of the economic pitfalls faced by developing countries in the Pacific, as well as a newfound enthusiasm for natural conservation.

## Appendix – Consulting Project Artifacts

A. Official Agency Website – <a href="http://fibpalau.com/">http://fibpalau.com/</a> | Source Code: <a href="mailto:github.com/fibpalau">github.com/fibpalau</a>



- B. <u>Context Analysis</u> The preliminary version of the Final Report. It contains an organizational analysis, project scopes, and initial timelines in regards to Goals 1 and 2.
- C. <u>DMS Shortlist</u> A narrowed down shortlist of candidate document management systems, intended to give the consulting partner a wide breadth of choices as well as a final recommendation. Includes gathered A and B level requirements.
- D. Process Flow Diagram Graphic of the FIAC Application lifespan.



## Appendix – Consulting Project Artifacts: Help Documents

- E. <u>Help Introduction</u> Internal help memorandum containing pertinent information (redacted) needed to maintain the system after the student consultant moved off-island.
- F. How to Use Box Documentation of key Box features and maintenance-related instructions. It also includes a walkthrough of how FIAC and Quarterly Report submissions are uploaded, and provides directions regarding upgrades and backups.
- G. <u>Site Billing & Maintenance</u> Additional information pertaining to AWS website hosting, and reverting to a stable version of the website.
- H. Scanning to Word Directions on how to scan documents with the new ScanGear driver.

If a link is broken, contact <u>mkornyev@gmail.com</u> to requisition a document.