

TECHNOLOGY CONSULTING

IN THE GLOBAL COMMUNITY

Final Consulting Report

Palau Bureau of Tourism

Abhi Devarapalli

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Carnegie Mellon University





Executive Summary

Student Consultant, Abhi Devarapalli
Community Partner, Kevin Mesebeluu

I. About the Organization

Bureau of Tourism (BOT) is a newly formed bureau operating under the Ministry of Natural Resources. It is responsible for establishing Palau's National Tourism Master Plan and implementing and enforcing the regulatory frameworks of the tourism industry.

Its mission statement is as follows:

BOT works with partners to deliver the Pristine Paradise Palau experience through innovation, collaboration and respect for Palau's culture and environment.

The Bureau's primary scope of work involves ensuring the good governance of Palau's tourism industry through registering tour operators and boat operators on the island as well as developing the guidelines for these operators to follow.

II. Operator Registry System

The Bureau of Tourism is looking to make a change in its system which it currently uses to register tour operators and boat operators. The current system requires operators to fill out forms with all the necessary information at the Bureau of Tourism's office. Tour Operators must revisit every year to fill the form to keep their license. Parts of this information is stored as a Microsoft Excel file while the majority including information about employees is kept as paper records.

After discussions with the director of the BOT, as well as other key members of the organization it was found that creating a database to store all of this key information would be useful for the organization. This provides for a more flexible form of information storage for the Bureau allowing them to quickly retrieve, create and update operator records. It also

requires operators to simply update the Bureau with any year-to-year changes instead of going through the entire registration process.

A summary of my outputs is listed below:

- A Microsoft Access Database was developed to collect and store information about tour operators, boat operators and employees in Palau. This database had form features to easily input required information as well as reporting features to gain key insights.
- All operator information previously stored in Excel files were transferred to the Access Database.
- Training sessions were conducted with compliance officers at the BOT so that they could understand the application and database
- A set of YouTube tutorial videos were created to supplement the training.

III. Recommendations

The Microsoft Access Database could be further supplemented through a document management system that stores additional paperwork required by the BOT. This will allow for the BOT to electronically store all information and offer an option for operators to scan and submit documents. Additionally, creating a website for the BOT would greatly help bring attention to the initiatives being taken toward sustainable development.

Consulting Partner

Kevin Mesebeluu
km.palau@gmail.com

Palau Bureau of Tourism
Koror, Palau

About the Consultant

Abhi Devarapalli
adevarap@andrew.cmu.edu

Abhi is a rising junior in Information Systems at
Carnegie Mellon University.



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I. About the Organization

Organization

Bureau of Tourism (BOT) is a newly formed bureau operating under the Ministry of Natural Resources. It is responsible for establishing Palau's National Tourism Master Plan and implementing and enforcing the regulatory frameworks of the tourism industry.

Its mission is as follows:

BOT works with partners to deliver the Pristine Paradise Palau experience through innovation, collaboration and respect for Palau's culture and environment.

The vision is similarly straightforward:

Palau is a destination that meets visitor expectations and delivers community benefits.

The overall goal of the Bureau of Tourism is to ensure good governance of Palau's tourism industry. This involves looking into ensuring Palauan people are empowered to contribute to the decision making in tourism development and share any economic opportunities that arise from this development.

Facilities

The BOT currently operates in a two-story building located in Malakal Park. They currently share offices with Bureau of Marine Resources and take a 1/3rd of first floor. Their office is 30x50 feet and has a bathroom, break room and offices for the Director as well as the Minister of Natural Resources. They will soon be expanding to the 2nd floor of the building.

Programs

The regular responsibilities of the BOT are listed below:

- Register Tour Operators and BOAT owners
- Conduct monitoring of Tour Operators and BOAT for compliance
- Participate in community and industry outreach and awareness
- Conducts Green Boots registration and training to Tour Operators and Guides
- Conducts Green Fins registration and training to Tour Operators, BOAT, and Guides
- Policy and Legislative review, providing recommendations and regulatory changes to enable BOT to fulfill mandate
- Represent BOT in agency requests for Tourism Representation, or on project committees requiring tourism representation
- Conducts community and industry outreach and engagement for BOT projects and programs

The registration of tour operators and BOAT owners is a daily activity for the BOT while operators are monitored weekly. Both these tasks are primarily handled by the compliance officers. Policy updates and new project opportunities are also two critical parts of the BOT's operations. These are usually spearheaded by the director along with the assistance of the policy advisors.

Staff

The organization is made up of 9 total staff members.

The 5 primary client partners for this engagement are:

1. Kevin Mesebeluu, Director- Kevin is in charge of Bureau of Tourism. He is also the person responsible for server maintenance and managing all the technology related things going on at the BOT. I will be working with him to analyze the problem, discuss the feasibility of the solution, understand the compatibility of the solution with the existing software and hardware infrastructure.
2. Mr. David Orrukem, Senior Compliance Specialist - SCS Orrukem has been with the Bureau the longest and his depth of knowledge and experience can assist and provide guidance and perspective. He is currently heading the Green Boots project. Green Boots was developed in Palau and is a best practice guide with codes of conduct for terrestrial tourism. SCS Orrukem has a background in Education and is also building a curriculum that will allow Green Boots to be introduced in the classroom as well as developed into a Tour Guide training course.
3. Mr. Fabian Iyar, Policy and Project Specialist. Mr. Iyar has headed many agencies in Palau, Palau Visitors Authority, the Palau Community Action Agency, and the Palau International Coral Reef Center. His strong experience in management is an asset in his current role at the Bureau as the Global Environment Facility lead implementor. The GEF 5 & 6 project has specific deliverables, one of them being the development of an information system that allows for the quick reporting of tourism related data.

4. Mr. Ray Marino, Compliance Specialist. Officer Marino is leading the Bureau's efforts in the registration of all Boat Operators and Owners operating in the Republic. Palau is one of the first countries in the world to enact through regulations a Public Private Partnership with Boat Owners Association for Tourism (BOAT). This regulation allows the Bureau to track more closely and accurately (with the cooperation of the boat owners) the movement of visitors in the rock islands, their compliance with best practices and regulations, and the proper and sustainable development of our tourism products. He can answer questions on what kind of information we are requiring when registering the BOAT'S.
5. Ms. Endira Apsalom, Compliance Officer II. Officer Apsalom is leading the registration of Tour Operators. Regulations require all Tour Operators to register with the Bureau. She can answer all questions on the type of information we are requiring from the Tour Operators. This is especially critical as the BOT is requiring tour operators to follow additional guidelines that enable them to become sustainable businesses.

The registration application will be done with close association with the compliance officers, Officer Marino and Officer Apsalom. The website will be done with close association with Mr. Iyar and Mr. Orrukem who have more involvement with sustainable tourism initiatives that they aim to showcase. These people are all comfortable with using simple forms and spreadsheets as seen from their current usage of excel forms to keep track of tour operators.

Technology Infrastructure

Every BOT employee owns a laptop that they can use to work and access their emails. The office is also equipped with a total of 6 desktop computers operating on Windows 10.

The BOT has received a connection from the new fiber optic cable. They have a private **BOT** network that is accessible anywhere inside the building and is fast (speed was measured at 20 Mbps down and 5 Mbps up).

Technology Management and Planning

There is currently not much technology usage within the BOT. Their only uses of technology are to communicate with other government organizations and to record registration information of tour and boat operators. In their organizational chart they have a position titled Staff Assistant on Tourism Activities (IT support). However, this position is currently vacant.

Two external IT staff members are called upon when any technical issues are faced. Examples of issues that these IT staff are called for include network issues (connectivity with Wi-Fi and printers) as well as any hardware related problems.

Communication

Most communication at the office is carried out in person as all the employees share the same office. All files and information are shared through email. Employees use their personal emails for work as well as official communication. For faster responses, the staff at the BOT use a messenger chat group. There is also an official email for the BOT that is used to communicate with other government organizations (bureauoftourism@gmail.com). Tour operators also communicate with the Bureau using either their official email or the personal emails of the operators in charge of registration.

The BOT uses quarterly newsletters and an annual report to summarize results. The quarterly newsletters list new employees and updates to current projects. Any new initiatives are also published in these newsletters along with a few statistics such as number of registered operators. The main annual report is called the Annual Performance Report summarizes the budget allocation, milestones reached by the BOT and targets/goals for next year. The APR also details operators who are currently following sustainable initiatives such as Green Boots.

Information Management

Technologically enabled information management is minimal at the BOT. Most records are kept in paper format. Registration information about tour and boat operators are also stored as digitally as excel sheets and are updated annually.

Business Systems

The BOT's business systems are largely paper based. Payroll is calculated biweekly. The timesheets are recorded on paper documents and then forwarded to the Personnel Office. Some of the information related to registration of tour operators and boat operators such as employee information is also stored in paper format.

II. Operator Registry System

Motivation

One of the key functions of the Bureau of Tourism is to register every tour operator and boat operator that operates in Palau. The operators are required to submit information regarding properties owned, employees, insurances and other key information regarding their business.

Currently all of this information is collected through paper-forms that operators fill in at the BOT office every year. This process is often-times long and may require multiple visits to the office for representatives from the operators. While select information related to tour operators is stored in a Microsoft Excel spreadsheet, the majority of this information is stored in the Bureau as paper forms. This creates further inconvenience for the Bureau when they are trying to search for and update their physical records.

The BOT's goal now is to create a system that allows this process to become smoother from the perspectives of both the employees in the BOT who are in charge of reporting and creating these excel sheets as well as the operators who go through this lengthy registration process every year.

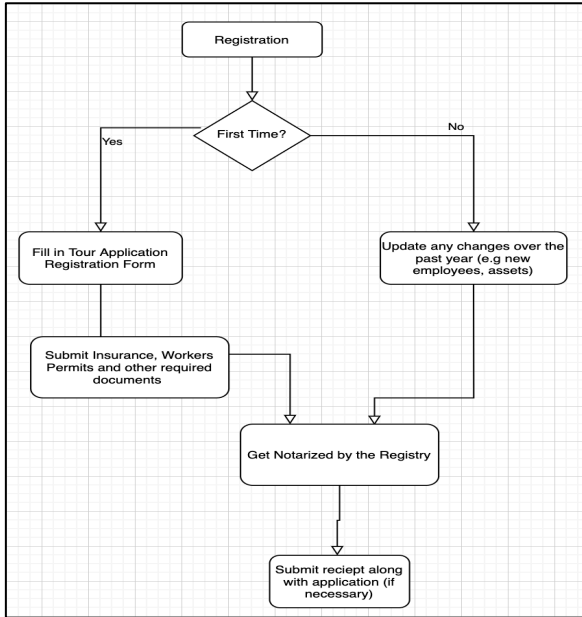
Creating a simpler process for this registration would greatly reduce the workload of both the operators who have to fill in the same information every year as well as the Bureau. A Microsoft Access database would be used to create a digital record of information related to employees, and operators on the island. This application would make it easier for the Bureau to update existing information as well. Tour operators will be allowed to just update changes to their operations every year instead of going through the entire registration process. Additionally, this database offers an increased flexibility when compared to an MS Excel Spreadsheet as relations can be made between boat operators, employees and tour operators.

Outcomes

A Microsoft Access database was delivered. The database is shared over the local BOT network allowing for concurrent usage. The database's main functionalities are listed below.

- Record storage for Boat Operators, Tour Operators and Employees.
- Fillable forms for each entity to easily input data
- Special Update form to make yearly updates
- Drop-down selection fields in forms
- Update form to make changes to form fields that change every year
- Reports on key statistics from each entity to provide quick summary

A summary of how the new Operator registration process will look is documented in the image below.



The expected outcomes in the context analysis have been mostly met. The one issue faced was in transferring existing records to the access database. While those records stored in excel sheets have been converted for the most part, the paper records have not yet been converted. About 75% of records in the Excel sheets have been converted in the training process although this only contains information about Tour Operators. The rest of this process can be handled by the compliance officers over the next few months.

All functionalities in the application have been tested thoroughly and revised after feedback from the users.

Instructions on how to use the application are also detailed in YouTube videos that will be uploaded. This will provide a reference point for future BOT employees to get started with using the application. The current compliance officers and Kevin have a good understanding of the application and I will be available for any other questions and concerns they may have in the near future.

Recommendations

#1 Document Management System

The current Microsoft Access Database implemented this summer is the first step in transforming the registration process. Through my conversations with tour operators on the island, another point of concern I was met with was the number of regulation documents that needed to be submitted to the Bureau. The same documents often need to be submitted to multiple other government organizations making the process feel repetitive.

I recommend implementing a document management system at the Bureau that would allow operators to scan and submit all the required documents. This would reduce the amount of work for the operator as they can submit all the necessary paperwork from their office. It would also provide the Bureau an easy way to organize paperwork by category and operator. In this way it would reduce time for both the operator and the Bureau. Additionally, for the Bureau this system aligns with their current movement to digitize all information and reduce their paper trail. Microsoft SharePoint is one document management system that comes with the Microsoft Office package that is already procured by the Bureau. This makes it a cheaper and more integrated potential option.

Ideally, it would be the best if such a system was built in a manner that would allow for all government organizations requesting similar paperwork to access the DMS so that operators have to submit paperwork once to all agencies. However, creating one for the Bureau could be the first step towards a more centralized system.

#2 Bureau of Tourism Website

Another key aspect of the Bureau's mission is to ensure good governance to Palau's tourism industry through promoting sustainable development goals within the country's tourism industry. A large effort has been made towards this with initiatives such as GreenBoots and GreenFins. However, this information is not easily available to the public as the Bureau of Tourism's website is currently buried deep within the website for Palau's government (<https://www.palau.gov.pw/executive-branch/ministries/natural-resources/bureau-of-tourism/>).

Creating a website for the BOT would greatly help bring attention to the initiatives being taken toward sustainable development. Using this website as a platform to recognize operators that partake in reaching these sustainable development goals could additionally act as an incentive for the operators to participate in these initiatives. Further development to the website could allow it to be integrated with the document management system by acting as a web portal for operators to submit documents as well as any changes to their operation.

Platforms such as WordPress and Squarespace could be looked into as easy options to create this website.

About the Consultant

Abhi Devarapalli is a rising junior in Information Systems with a minor in Computer Science at Carnegie Mellon University.

Appendix

Screenshots from application

Yearly Update Page

Updates

Company Name	<input type="text" value="99Tours"/>	Insurance	<input type="text"/>
Address	<input type="text" value="Malakal, Koror"/>	Completed	<input checked="" type="checkbox"/>
Contact No.	<input type="text" value="488-2890"/>	Comments	<input type="text" value="None."/>
Litigation	<input type="checkbox"/>		
Existing Judge	<input type="checkbox"/>		
Assets Details	<input checked="" type="checkbox"/>		
Delin Taxes	<input type="checkbox"/>		

Employees

Employee Name	Job Title	Citizenship	Active
John Smith	Admin		<input checked="" type="checkbox"/>
*			<input type="checkbox"/>

Employee Form

Employee Form

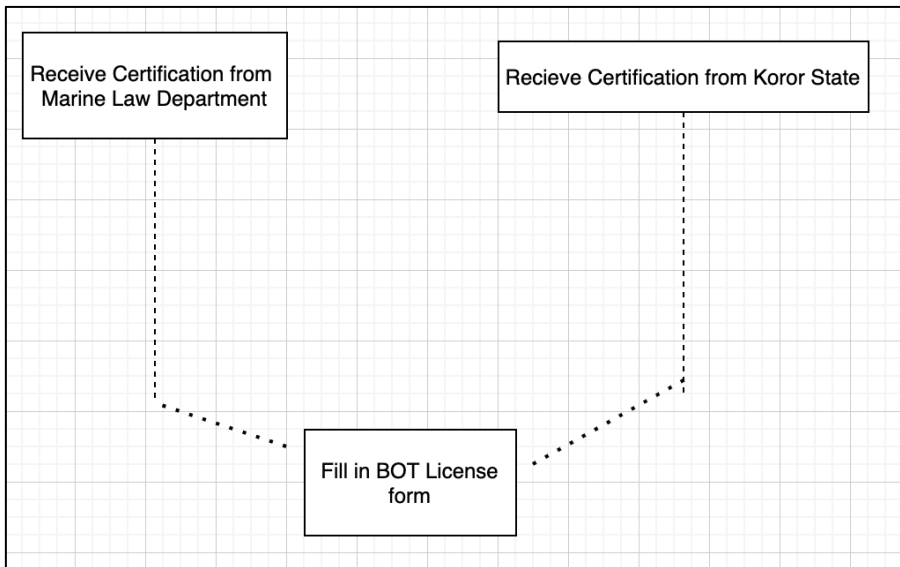
ID	<input type="text" value="2"/>	Date of Hire	<input type="text" value="7/27/2020"/>
Employee Name	<input type="text" value="John Smith"/>	Date of Birth	<input type="text" value="5/13/2001"/>
Employee ID	<input type="text"/>	Permit ID	<input type="text"/>
Tour Operator	<input type="text" value="99Tours"/>	Citizenship	<input type="text"/>
Job Title	<input type="text" value="Admin"/>	Social Security	<input type="text"/>
Green Boots	<input type="checkbox"/>		
Green Fins	<input type="checkbox"/>		
Active	<input checked="" type="checkbox"/>		

Tour Operator Report

Tour Operators

Company Name	Owner Name	Address	Contact Number	Email
99Tours	Theofina Mesubed	Malakal, Koror	488-2890	N/A
Club MSO	Belhaim Sakuna	Malakal, Franco's Bldng	488-0819	hashizo123@gmail.
Sandy's Tours	Sandy			
Solitude Cruise and Sc Jordan Malsol		Malakal, Koror	778-3021	mtellach@gmail.com

Boat Registration Process (One-Time)



Tour Operator Registration Process (Yearly) (Old Process)

