

GEMINI SYSTEMS INC.

39 Righton Crescent

Washington Gardens

Kingston 20

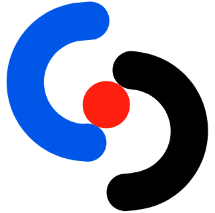
[info@gemsys.com](mailto:info@gemsys.com)

www.geminisystems.com

**Business System: Analysis, Design and Development**

**Business Name: Gemini Systems Inc.**

**Business Slogan**: “Bringing Creativity to Life through IT Solutions”

**Business Logo:**  

**Business colour scheme:** Blue, black, and red

**Purpose of the IT business**: To design and implement efficient software solutions in order to provide quality services to our customers.

**Vision of the Business**: To be the leading I.C.T Company that offers superior quality and value to position our clients strategically.

**Mission of the Business**: Combining leading-edge business strategy and IT knowledge, to develop efficient and effective IT support. To provide project management and strategic business solutions to keep our clients one step ahead of their competitors.

**Management Roles and Responsibility:**

**CEO**: Kennando Spence

* Communicating, on behalf of the company, with shareholders, government entities, and the public
* Leading the development of the company’s long-term strategies and making sure they are measurable
* Creating and implementing the company’s or organization’s vision and mission
* Soliciting advice and guidance from the Board of Directors

**Human Resource Manager**: Natalee Baker

* Develop and implement HR strategies and initiatives aligned with the overall business strategy
* Bridge management and employee relations by addressing demands, grievances or other issues
* Manage the recruitment and selection process
* Support current and future business needs through the development, engagement, motivation and preservation of human capital
* Develop and monitor overall HR strategies, systems, tactics and procedures across the organization
* Nurture a positive working environment
* Oversee and manage a performance appraisal system that drives high performance
* Maintain pay plan and benefits program
* Assess training needs to apply and monitor training programs
* Report to management and provide decision support through HR metrics
* Ensure legal compliance throughout human resource management

**Project Manager**: Nadeisha Vassell

* Planning and Defining Scope
* Activity Planning and Sequencing
* Resource Planning
* Developing Schedules
* Time Estimating
* Cost Estimating
* Developing a Budget
* Documentation

**Financial Manager**: Gary Hill

* Prepare financial statements, business activity reports, and forecasts,
* Monitor financial details to ensure that legal requirements are met,
* Supervise employees who do financial reporting and budgeting,
* Review company financial reports and seek ways to reduce costs,
* Analyse market trends to find opportunities for expansion or for acquiring other companies,
* Help management make financial decisions.

**Public Relation Officer**: Tanika Lawrence

* Develop PR campaigns and media relations strategies
* Collaborate with internal teams and maintain open communication with senior management
* Edit and update promotional material and publications (brochures, videos, social media posts etc.)
* Prepare and distribute press releases
* Organize PR events (e.g. open days, press conferences) and serve as the company’s spokesperson
* Seek opportunities for partnerships, sponsorships and advertising
* Address inquiries from the media and other parties
* Track media coverage and follow industry trends
* Prepare and submit PR reports
* Manage PR issues

**System Development Team Role:**

**Programmer: Kennando Spence**

1. Description 1 – Implement application/website interface
2. Description 2 – Develop and implement website backend
3. Description 3 – Ability to code pages using scripting languages
4. Description 4 - Test and maintain program code

**Web Page Designer: Natalee Baker**

1. Description 1 – Develop the blueprint of the website
2. Description 2 – Implement web graphic design
3. Description 3 – User experience design
4. Description 4 – Creating the user manual for users

**Content Management: Nadeisha Vassell**

1. Description 1 – Researching the relevant information
2. Description 2 – Sourcing of multimedia contents
3. Description 3 – Writing, editing and proof-reading content
4. Description4 – Brainstorming with team members to develop new ideas

**System’s Analyst: Gary Hill**

1. Description 1 – Review company policies and procedures to ensure that it is aligned with the system being implemented
2. Description 2 – Interact with internal users and customers to learn and document requirements that are then used to produce business required documents.
3. Description 3 – Interact with software architect to understand software limitations.
4. Description 4 – Acts as a liaison between the business side of the company and the It side of the company.

**Quality Assurance Manager: Tanika Lawrence**

1. Description1 -Reviewing and analysing code ensuring that best practices are followed. Monitors and supervises the performance of their team to maintains and improve the quality of work
2. Description 2 -Prepares quality documentation and reports by collecting, analysing, and summarizing information
3. Description 3 -Ensures quality work is being delivered to the client’s expectations and assists in setting those expectations
4. Description -Records bugs found and other software issues, create reports detailing these issues, and the potential problems they may create and address these issues before delivery to client.

**System Identification and Project Selection**

1. **Choosing the organization to be accessed**:

Passport, Immigration and Citizenship Agency (PICA)

1. **General Overview of PICA:**

**History**

The Passport, Immigration and Citizenship Agency (PICA) was established on June 1, 2007 as an Executive Agency (EA) to be a self-financing, performance-based, and service-oriented institution. The Agency evolved from the former Immigration, Citizenship and Passport Services Division of the Ministry of National Security following a modernization programme which started in 2005.

Since then, PICA has been taking steps to transform itself into a world-class organization. The aim is to provide efficient, quality service to its clients through a well-motivated and knowledgeable staff.

PICA’s functions are integral to the nation’s border security system. The Agency accepts and process passport applications, manages the island’s immigration processes and handles matters in relation to application for and renunciation of Jamaican citizenship.

As an Executive Agency (EA) the organization is required to achieve certain performance indicators as a measure of its efficiency and success. Among these targets are: processing passengers at ports in no more than 2 minutes and processing passport applications submitted to its Kingston offices within 7 days and 14 days for applications made through its offices in Montego Bay. Additionally, local applications for Jamaican citizenship by descent are processed within 30 days.

To ensure optimum performance and efficiency of staff, structured on-going training has been incorporated as a policy of the new Agency and plans are afoot to introduce a Performance-Based Management System for continuous evaluation and development of personnel.

**Some of the initiatives that have been undertaken to improve on the delivery of service to customers since attaining EA status include:**

* The introduction of debit and credit card service for ease of transaction at our headquarters and at our office in Montego Bay
* Next-day and three-day expedited services
* The introduction of a mobile service for passport application

**The following are the major functions for which the Agency is responsible:**

[**Immigration**](http://www.pica.gov.jm/about-us/#custom-tab-1-immigration)

* Incoming and outgoing immigration examination of all persons entering or leaving Jamaica by air and sea.
* Administering visas, entry permits and other documents for non-Jamaican visitors and residents, Handling requests for permanent residency status
* Managing the deportation and repatriation of those persons not qualified to remain in Jamaica as well as handling matters relating to refugees to the island

**Citizenship**

Processing of applications for Citizenship as well as for Renunciation and Reinstatement of Citizenship.

**Passport Services**

* Receiving passport applications at the headquarters and Montego Bay PICA locations, designated JCF locations, and Jamaica’s foreign missions.
* Issuing passports to Jamaicans living at home and abroad, this is carried out by a centralized facility at the Constant Spring Road Headquarters.

**Investigation and Surveillance Unit**

Investigation of offences committed in any of the areas regulated by PICA. This function is carried out by our investigative arm.

**The laws that govern the operations of the Agency are as follows:**

* The Jamaican Constitution
* The Immigration Restriction (Commonwealth Citizen) Act
* The Jamaica Nationality Act
* The Alien’s Act
* The Passport Act and Regulations
* The Foreign Nationals and Commonwealth Citizens (Employment) Act
* The Caribbean community (Free Movement) of Skilled Persons Act
* The Executive Agencies Act 2002
* The Financial Administration and Audit Act

1. **Functional area that is in need of an Information System**: Immigration Unit
2. **Determining the scope of study:** Permanent Residence
3. **Describe the current system being used:** Currently in use is a manual system where persons who are considered as Permanent Residence would visit the office once they have fallen between the following categories:

* Employment (not less than 3 years)
* Retirement
* Marriage to a Jamaican
* Dependent
* Previous holders of Unconditional Landing status by virtue of marriage to a Jamaican

Once this requirement has been met, the customer would speak to an Immigration Officer where they would collect their original documents, such as:

* Valid passport (entry visa for Jamaica is required for nationals of Non-Commonwealth countries as well as nationals of Commonwealth countries on whom a visa requirement has been imposed)
* Evidence of financial status and means of support such as particulars of pension, bank statement, property owned and business investments. (PICA reserves the right to request additional documents [such as updated financial documents e.g. bank balances or business financial statements) during the application process.
* Business owners must present Certificate of Registration, Tax Compliance Certificate (TCC) – this may be printed from the website, proof of Income Tax Returns (applicable to holders of Jamaican work permits & owners of businesses in Jamaica) and audited financial statement for the last full year of the business’ operation.
* Birth Certificate of applicant (original) and should be translated if not in English.
* Birth Certificate or Jamaican passport of Jamaican Spouse – applicable to applicants who are married to a Jamaican
* Marriage Certificate, Divorce Decree /Decree Absolute where applicable
* Birth Certificate of children where applicable
* Local Medical Certificate – certificate of good health (in Jamaica)
* Police Certificate from previous country or countries of residence and from Jamaica if resided here for six (6) months or more
* Two (2) identical passport size photographs certified by a Justice of the Peace
* Evidence of asset/property ownership in Jamaica or abroad (documents should be translated if not in English)
* Letter stating reason for seeking permanent residence in Jamaica
* Letter from two reputable references or acquaintances (nationals of Jamaica)
* Non-refundable processing fee of Jamaican One Hundred Thousand dollars JMD100,000.00
* Letters in (l) & (m) must be addressed to:

The Chief Executive Officer  
Passport, Immigration and Citizenship Agency  
25 Constant Spring Road,  
Kingston 10.

Once the customer meets these requirements, the Immigration Officer submits the customer’s documents to PICA’s registry and a file is then created. The Immigration Officer from 8 Waterloo Road would then submit the file to the Investigative and Surveillance Unit at 25 Constant Spring Road, where the Field Officers from ISU would then conduct background checks on the individuals, go to their location to verify if the information that was presented to the agency is indeed correct. After the investigation, ISU would send the results to the Immigration Officers, who then prepares a minute, which is a summary of what exactly was found by the Investigative and Surveillance Unit and what was recommended by ISU. The file is then sent to the Director of Immigration to review both the Immigration and ISU findings about the individual. It is then submitted to the DCEO for approval. It is then sent back to the Director of Immigration where he/she instructs the Immigration Officer if the request has been approved, denied or deferred. The Immigration Officer would contact the applicant, as to inform them whether they were accepted, rejected, or deferred. If accepted, the applicant would visit the office and be presented with an acknowledgment letter from the Immigration Officer that he/she has been successful in getting their Permanent Residence and that they should not leave the island for the next 12 consecutive months. The Immigration Officer would collect their passports where the Permanent Residence would be stamped in it. If it is denied, the Immigration Officer would inform them as to what they need to do in order to be successful with another PR application. If it is differed, the Director of Immigration or DCEO is requesting additional information about the individual. This usually takes within 3 to 6 months for the application to the approve, denied, or differed.

1. **Pros and Cons**

|  |  |
| --- | --- |
| **Pros** | **Cons** |
| 1.Immigration Officers having the opportunity to communicate on a one on one basis with each customer | Mails can be lost or damaged during dispatched to and from both waterloo and constant spring location |
| 2. Field Officers investigating applicants aid in Border Security | Background checks are time consuming |
| 3. Generates income for the agency | Process within the office moves slowly since everything is being done manually |
| 4. Allows a foreign national to live and engage in productive activities in Jamaica without restrictions on their entry to the island | Documents submitted are sometimes damaged e.g. old birth certificates |
| 5. Foreign nationals living in Jamaica also benefits the country in revenue generation | They may not meet all the requirements that are listed by PICA |

1. **Overview of the problem:**

The problem that exist is the manual nature of the current process. It should instead be automated for workflow consistency, efficiency, and timely delivery of the service being offered. Physical documents take up a lot of room space, and the sensitive documents that have been collected are prone to damages or being misplaced. The process is considered to be time consuming, especially searching for relevant documentation while a customer is waiting. Also, the lack of security as it relates to the filing cabinets and the cost to purchase paper on a regular basis is costing the agency significantly.

1. **Two Automated Solutions:**
2. Creating an online system where applicants can apply for their Permanent Residence online without coming into the office. This will also include features such as login, uploading documents, uploading and downloading of information, progress report, and message portal for its internal users.
3. Creating a system to facilitate communication between both the Immigration and the Investigative and Surveillance Unit in order to share secured content between the various departments.
4. **Project Select Solution**

Our organization will be creating a web application to streamline the current process. Being that this is an online platform, it will be cost effective, available around the clock, increase efficiency, build the agency’s customer base, and reduce bottlenecks that exist in the current workflow.

1. **Justification of System selection**

* users will be able to quickly search for records for easy viewing.
* A “paperless” environment – less paper consumption by the company.
* Backup – the system’s database can be backed up to provide an additional layer of information security.
* Employees will be able to track and carry out different actions on an application without the need to locate and handle the physical file.

**Statement of Requirements**

* **Overview of the problem to be solved as previously stated:**

The problem to be solved is to convert a manual system into an online platform where applicants can submit their Permanent Residence application at their own convenience.

* **Overview of the proposed system:**

Creating an online system where applicants can apply for their Permanent Residence online without coming into the office. This will also include features such as login, uploading documents, uploading and downloading of information, progress report, and message portal for its internal users.

* **Input Requirements:**
* Applicants First Name, Last Name and Middle Name
* Applicants Address
* Date of Birth
* Citizenship
* Passport Number
* Gender
* Country of Current Residence
* Email Address
* Telephone Number
* Valid passport (entry visa for Jamaica is required for nationals of Non-Commonwealth countries as well as nationals of Commonwealth countries on whom a visa requirement has been imposed)
* Evidence of financial status and means of support such as particulars of pension, bank statement, property owned and business investments. (PICA reserves the right to request additional documents [such as updated financial documents e.g. bank balances or business financial statements) during the application process.
* Business owners must present Certificate of Registration, Tax Compliance Certificate (TCC) – this may be printed from the website, proof of Income Tax Returns (applicable to holders of Jamaican work permits & owners of businesses in Jamaica) and audited financial statement for the last full year of the business’ operation.
* Birth Certificate of applicant (original) and should be translated if not in English.
* Birth Certificate or Jamaican passport of Jamaican Spouse – applicable to applicants who are married to a Jamaican
* Marriage Certificate, Divorce Decree /Decree Absolute where applicable
* Birth Certificate of children where applicable
* Local Medical Certificate – certificate of good health (in Jamaica)
* Police Certificate from previous country or countries of residence and from Jamaica if resided here for six (6) months or more
* Two (2) identical passport size photographs certified by a Justice of the Peace
* Evidence of asset/property ownership in Jamaica or abroad (documents should be translated if not in English)
* Letter stating reason for seeking permanent residence in Jamaica
* Letter from two
* reputable references or acquaintances (nationals of Jamaica)
* Letters in (l) & (m) must be addressed to:

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Passport, Immigration and Citizenship Agency  
25 Constant Spring Road,  
Kingston 10

* **Processing Requirements:**
  + Verification of documents: Ensures that all uploaded documents listed above are in the specified file format.
  + To verify that the authenticity of internal user.
  + Facilitate and streamline the internal tracking of applications so that the process is done within the specified time frame.
  + Provide applicants with timely updates about their application.
* **Output Requirements:**
  + Progress Report: Provide the application with a printable progress report
  + Alert the users by means of Email that their application was received and is been processed
* **Performance Requirements:**
  + Ensuring that users received a confirmation email within the first minute of submission of their application
  + Updated
  + Implementation of an online chat to provide liaison between customers and the customer service personnel of any problems or suggestions
  + Sending out daily notifications to clients
  + Ability to process a large volume of information within a specified timeframe; system not being overloaded
* **Control Requirements:**
  + Only PICA Immigration officers will be able to view and use the documents uploaded by the customers
  + The investigative team can only access information sent to the by the Immigration Officers and not what was sent from the customer’s computer
  + Customers can only view, add and delete their own documents before uploading
  + The Immigration login will also facilitates *accepting or rejecting* a customer’s PR request
  + Immigration Officers are not authorized to take part in the investigative processes so they cannot access the investigative surveillance system.

**Feasibility Study**

**Overview of the problem to be solved**

Gemini Systems Inc. prepared this Feasibility Study Report for Broadcast of the Passport and Immigration Citizenship Authorities (PICA) as was requested. This Feasibility Study Report was prepared in accordance with the tasks outlined by senior management in having a Manual Filing and Processing system in place. The information was gathered by the use of feasibility study questionnaires and by interview of the staff at PICA and users of the current system. The team members, who comprises of Mr. Kennando Spence, Ms. Natalee Baker, Ms. Nadeisha Vassell, Mr. Gary Hill and Ms. Tanika Lawrence have done an in-depth analysis and based on their skills and expertise have decided that this project is well within their capabilities to produce.

The purpose of this Feasibility Study Report is to document an in-depth analysis of all the processes that will be involved and will objectively and rationally uncover the strengths and weaknesses of the existing system versus the proposed electronic filing and processing system.

The report provides the Managing Committee with sufficient data to select a more feasible system of Processing require in the institution.

The areas of feasibility to be analysed are:

* Technical Feasibility – This answers whether company has the technological resources to undertake the project and if the processes and procedures are beneficial to project success.
* Schedule Feasibility – This answers whether the company currently has the time resources to undertake the project and if the project is completable in the available time. This is accompanied by a Gantt chart.
* Economic Feasibility - The economic feasibility study contains a cost/benefit analysis.
* Operational Feasibility - Measures how well we will be able to solve the current problems and take advantage of opportunities that are presented during the course of this project.

After careful analysis of the current system, we at Gemini Systems have found the recommended project of the electronic filing and processing system, to be a very beneficial investment.

Economic feasibility

This report represents the Cost/Benefit analysis proposal for the design and installation of electronic filing and processing system at Passport and Immigration Citizenship Authorities (PICA). The analysis that is used in this report will be a combination of a market study and an economic analysis of the system and will give senior management an idea of the expected return on the investment to be achieved from this project.

## **General Assumptions of the Cost/Benefit Analysis**

### **A. Cost/Benefit Analysis Cash Flow Projections**

a) The economic feasibility cash flow statement has been created to identify the value of unrestricted resources available to fund the project including planning to the implementation stage of the project, staff salaries and administrative costs.

b) A 5% inflationary increase has been assumed in the Projection of the costs shown.

### **B. Estimated Total Project Related and Operational Costs**

The determination of economic feasibility requires an identification of the potential costs associated with the new system. The types of costs which are associated with the new system are:

**Project-related costs:**

* Systems Analysis and research will be done by Gemini Systems contractors.
* Software to be designed and developed by Gemini Systems programmers.
* Hardware Equipment to be acquired

**Operational costs**

* Installing the system
* Personnel (training and Maintenance)
* Maintenance: hardware
* Maintenance: software

The estimated total costs for configuration of the electronic filing and processing system would be ***US 11,900.00 dollars***. The significant part of that total cost comes from varied expenditures in the development and production cost of the project, including hardware components that will be necessary for the new system to function. The first year, it is likely the system would have higher computer equipment and software acquisition costs. *Please see budget and forecast schedule for breakdown of these costs.*

### **C. Estimated Total Benefits**

According to our analysis, the reference strategy for comparisons was the traditional manual system. The estimated net benefit from using the electronic filing and processing system for a 5-year period is a direct reduction in the costs of the current system. Implementation of the electronic filing and processing system can result in a positive financial return on investment to the organization; however, the magnitude of the return is sensitive to several key factors. This increase in activity is expected to increase current earnings by an average 50%. *Please see budget and forecast schedule for breakdown of these figures.*

An addition, there are many intangible benefits to be achieved by implementing this system. Intangible benefits include:

* To better secure their files
* To store their files on a database
* Graphical User Interface
* Ease of locating records
* Improved consistency, continuity, efficiency and productivity in program delivery, management and administration.

### **D. Risk Factors**

There are a few minor issues which may potentially distort our calculations for the economic feasibility study. First, costs may have been underestimated. (However, we did compare our costs to a comparable service’s start-up costs). Furthermore, although we hoped to exhaust the potential of cloud services, there will likely be items that we must purchase that we did not expect. Other potential risks to the new system could be verification of the documents as it can be time consuming and Equipment failure.

Cost Benefit Analysis

Based on the CBA, the return on investment is clear. Quality doesn't cost, it pays. The membership managements system will pay for itself in a few years, and as you become more and more proficient with the system, the economic windfall only accelerates.

## **BUDGETS AND FORECASTS**

|  |  |
| --- | --- |
| **Component** | **Total** |
| Electronic filing and processing system (software) | $2,750.00US |
| **Dell PowerEdge T310 Server:** 2 Quad-core Intel® Xeon® 5600 series, Microsoft Windows Server2008 R2 Enterprise, 8GB DDR3 Memory, 25TB Solid State Drive, 2 Intel GB Ethernet Cards, Dual hot-plug redundant high-efficiency 750W power supplies. | $3,750.00US |
| **Configuration of server:** Install and configure Microsoft Windows Server2008 R2 Enterprise, Microsoft SQL Server 2008 Enterprise and Symantec Endpoint Protection 2012. | $2,250.00US |
| Netgear Ready NAS Network Storage server: Backup solution which has a total storage of 25TB. | $2,000US |
| Training Users to use the new system | $1,150.00US |
| **Total Package Cost** | **$11,900.00US** |

### **Cost Benefit Analysis Forecasts**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Cost (USD) | Year | | | | | |
|  | 0 | 1 | 2 | 3 | 4 | 5 |
| Development Cost | 11900 |  |  |  |  |  |
| Operation |  | 12000 | 12200 | 12350 | 12425 | 12550 |
| Total Cost | 11900 | 12000 | 12200 | 12350 | 12425 | 12550 |
| Discount @15% | 1.00 | 0.87 | 0.80 | 0.76 | 0.69 | 0.60 |
| Present Value | 11900 | 10440 | 9760 | 9386 | 8573 | 7530 |
| Cumulative Cost | 11900 | 22440 | 21960 | 21736 | 20998 | 20080 |
| Benefits |  |  |  |  |  |  |
| Tangible |  | 8000 | 9500 | 11000 | 12500 | 14000 |
| Intangible |  | 2000 | 2000 | 2200 | 2450 | 2700 |
| Total Benefits |  | 10000 | 11500 | 13200 | 14950 | 16700 |
| Discount @15% | 1.00 | 0.87 | 0.80 | 0.76 | 0.69 | 0.60 |
| Benefit value |  | 8700 | 9200 | 10032 | 10315 | 10020 |
| Cumulative Benefit Cost |  | 8700 | 17900 | 27932 | 38247 | 48267 |
| Cumulative Cost + Benefits |  | -13740 | -4060 | 6196 | 17249 | 28187 |

Present Value = Total cost \* Discount

Cumulative Cost = Total cost + Present value

Benefit Value = Total benefit \* Discount

Cumulative Benefit Cost yr 2 = Cumulative Benefit cost yr 1 + Benefit value yr 2

Cumulative Cost + Benefit = Cumulative Benefit – Cumulative Cost

### **Payback Schedule**

**Operational feasibility**

This operational feasibility study is an evaluation to determine whether Gemini System Electronic filing and processing system is operationally acceptable. It will also determine how the proposed system will fit with the current operational system.

## **Fact Finding Techniques**

The methods used in studying the current manual filing system are observation of the existing systems, looking into the sample data, and interviewing with administrators. Other users who are already using the existing systems, people who are going to use new system were given questionnaires to fill out. All these are methods of fact-finding were conducted by our professional team members at Gemini System.

### **OBSERVATION**

Our first method of gathering information on the current system was an observation. Our observations show the following problems with the existing manual filing system:

* Currently members records are entered manually and stored in file jackets along with other information about the member.
* We also observed that the users had to be going through files to locate an applicant’s record and the process was time consuming and redundant.
* A potted plant is stored on top of one of the cabinets and this is watered daily, hence, this poses the possibility of the records getting wet or dirty through the handling the plant.
* The registry area is not secured as there is no restricted access to the area.
* The filing cabinets are not elevated from the ground and as such, when the office is flooded; overtime the filing cabinets become rusty and start to rot, in so doing; the records are destroyed or damaged.
* The locks on some of the filing cabinets are not working so the records are not safe as this causes unrestricted access to the records.

### **INTERVIEWS**

In order to gather information for the proposed system interviews with the following key people are conducted. These interviews provided valuable information about the existing systems and their inputs and suggestion about the new system will be greatly appreciated.

* The General Manager at PICA
* The Client care staff at PICA

The General Manager thinks the proposed system will benefit the PICA greatly, even though with any computerized system, there will always be slight disadvantages. He pointed out that the proposed system will increase the output of the organization and will accommodate more data and quicker retrieval of information and reports for application processing.

The Administrative were all of the view that the proposed system will greatly improve the reporting process. They are anticipating the reports that the proposed system will be able to generate that will make their workload easier.

### **QUESTIONNAIRES**

Different questionnaires were used in collaboration with the interview process. The different stakeholders gave answers to the questions that were presented to them on the questionnaires. The questionnaires proved to be an effective mechanism for collection of the required information and were used to support and supplement the other methods for evaluating the proposed project.

In doing the final operational analysis, the PIECES framework for operational feasibility was utilized in preparing this aspect of the report.

**Performance**

Based on the feedback from users of the current system and Broadcast of Passport and Immigration Citizenship, the new system will benefit the institution greatly, the main reason being a more efficient system of record keeping. It will allow for quicker and easier access to user records and the ability to effectively store more data on users.

**Information**

Applicants’ records would be easily updated and more organized. The new system is capable of organizing the records in a way that is easily understood and can be formatted to the user’s needs.

**Economy**

Having the electronic filing and processing system in place will prove very economical as it will reduce costs by minimizing some filing-related and printing costs by 50 - 60%. Money will be saved a lot by using an electronic filing and processing system, not just the cost of paper and file folders, but the cost of labour and space. The efficiencies created by simply typing a few characters to retrieve information on a member -- as opposed to searching through thousands of file folders, filing and then re-filing will save the administrative staff valuable time. That's even taking the cost of the creating the system into account.

**Control**

Gemini System Electronic filing and processing system is guarantees safety and security of the users’ record by implementing authorized access to the files, for example use of passwords. Records are also more secure physically, that is, in the event of natural disasters and mischievous acts.

**Efficiency**

The new system offers more storage capacity than the current system. With the Cloud service features available with the electronic filing and processing system, making the registering of new applications much quicker and much easier.

**Services**

Gemini System Electronic filing and processing system is much more reliable, and once the system is properly maintained, stored information is also maintained. This system will prove more flexible and can process records and information in a much shorter time span.

**Acceptability of Proposed System**

Based on the feedback from the senior management and end users of the new system, they are fully supportive of having this new system in place. The users have expressed a need for a computerized record keeping system and maintain that they will dedicate themselves to learning about the new system even though they are not all comfortable working on a computer. Some say, they have little to no experience with database software, however, the system will be easy to use, and training will be provided for all users.

**Technical feasibility**

This proposed system is projected to be technically feasible, once we implement the required hardware, software and networking infrastructure within the organization. We have already sourced these materials and they will be delivered once approval has been given.

Users of the system have been involved in the design stage since they are the ones who will be using it and know what to expect from it. The design of the proposed system will be done with the users in mind, making it as user-friendly as possible.

Although the current staff have little to no technical expertise they will be trained by our efficient team thus the transition to the new system we expect no issue. However, should any arise we will be able to provide technical support.

The following technical aspects were also analysed and were found to be well within our capabilities:

**User Interface**

The user interface is web-based, making it easier to secure access for users, as well as being more familiar to them. Ideally, any part of the user interface can be customized and it will be simple to use templates to customize forms and reports to suit the current users.

**Installation**

Installation of the system is will not be a tedious undertaking. The installation instructions provided will be clear and easy to follow.

**Backup**

This system will feature scripts to enable data backup to CD, any other removable storage and the utilizing of cloud services.

The use of the proposed technology has little risk. As stated the team is familiar with the tools to be used. It has been proven and is widely used in both commercial and personal projects/applications.

The scope of the project can be managed by our web and database experience. The constraints placed upon the project team will not hinder our ability to produce the desired product. Essentially the project scope will not exceed the capabilities of the technology used.

The ever-present constraint that seems present in every project is time. This constraint is also present in this project, however our team member, Nadeisha Vassell has developed a project schedule that is realistic which provides for the completion of the project on time. In this project the scope is not beyond the resources that our team possesses. Given our frequent contact, our familiarity with the technology to be used and a solid project schedule, we are able to assess risks to the project quickly and effectively deal with them.

# **SCHEDULE FEASIBILITY**

To accomplish this project a schedule must be set containing the steps to each task, its start date and the date that task will be completed. This is to ensure a smooth rollout of each task without any conflicts.

Given the size of this project and the fact that the team meets at least twice a week to discuss the project we feel that the project can be completed on time as specified. However, these dates can change if issues occur.

The Gantt chart below shows the step-by-step process of the implementation of the electronic filing and processing system at the Passport and Immigration Citizenship Authorities (PICA). The implementation of the project we are estimating at is three months, which will cover testing along with training users.

# **PROJECT SCHEDULE**



# **GANTT CHART**



# **FINAL RECOMMENDATION**

We proposed that creating the electronic filing and processing system will enable Passport and Immigration Citizenship Authorities (PICA) to become more efficient in their processing of candidate record keeping and by extension, the entire operations. The current system was found to be very inefficient and not very effective for such an institution. After careful analysis of the current system, we at Gemini System have found that the recommended project will be a very good addition to the institution. We have analysed all areas of this project and have found such a system to be feasible.