

# [Pomio district electronic tertiary student subsidy funding (tssf) system](https://assignbuster.com/pomio-district-electronic-tertiary-student-subsidy-funding-tssf-system/)

This proposal document provides a discussion of the context of the project including the background, problem statement, purpose and significance of the project. It also discusses the review of literature pertaining to the project such as significant terms and concepts, high-level description of the proposed solution of the ETSSF system. Further, it discusses the methodology that could be used to develop the proposed solution including theories, models, processes and/or technologies. Finally, it discusses the tentative schedule and key deliverables of the project, glossary of key terminologies and references used to develop this proposal.

Background" Going to university is big step in your life andcareer. It's a wonderful opportunity to further your knowledge, discover your passion and equip yourself with the right skills for yourdream job. But, like most things in life, it requires a sacrifice of time, energy and financial resources" (Career Wise, 2017, para 1). It comes to the government attention that, they realised the students are the future human resource for the country and they must invest in them while still a student. Thus, the government introduce Tuition Fee FreeEducationwhich reduce the parent's burden.

Pomio is located in the remote area of East New Britain Province (ENBP), Papua New Guinea (PNG) and it is also one of the District of ENBP known as Pomio District. Pomio District introduced the Tertiary Student Subsidy Funding in 2014, purposely to support the parents paying for their sibling's school fees. It is restricted only to the Pomio citizen who attended and will be attended recognized Tertiary institution.

Since Pomio District is in the remote area, there are lack of roads connectivity due to the lack of development. Pomio District decided to allow its Local Level Government (LLG) to implement TSSF because people are scattered apart.

Currently, in all the LLGs of Pomio District the student need to show their acceptance letter then will receive a TSSF application form. After filling the form they then attach the form with their acceptance letter and also the transcript except the new intake and submit them to the LLGs staff. The president sign the papers then bring all the application letter to the District Headquarter. Some LLG president will be traveling on the boat, some will be walking for one to two days and some will be traveling on the vehicle to reach the headquarters on a good weather condition. The District Administration then approve the list and travel on a boat to Kokopo bank branch to make the payment and send the list to registrars of Tertiary institution in PNG that the students attended.

Problem statement

Pomio District geographical is one of the factor that affect the travelling condition during bad weather for the Presidents of five LLG to reach the District Headquarter which caused delay in payment. Some non- Pomio citizens are also benefit from the TSSF through nepotism that is being practiced by the LLG staffs. There are also some student left out because their application form (papers) are being misplaced by either the LLGs staff or the District Headquarter staff. The staff need to thoroughly check through its student application form for necessary information needed and the same thing apply in the District Headquarter which is time consuming.

Purpose & significance

Electronic Tertiary Student Subsidy Funding (ETSSF) is an online financial scheme system for the Tertiary Student in the District level, in this case is the Pomio District. ETSSF help the LLG's staff to record all the student information through desktop application on time. The web application allow the district Headquarter staff to view the Tertiary student summary and either produce a cheque for school fee payment or make an online payment which make it easier to pay on time before the registration period of all Tertiary Institution.

Literature reviewAbstraction

ETSSF can also be referred to as the Tertiary Student Financial Scheme (TSFS) that practice in some countries. The developed Countries implementing TSFS in varies context online whereas the developing countries implementing the system manually in different context depending on government Policies. In this review focusing on ETSSF will be more elaborate on the functionality, previous project and benefit of the system.

What is Electronic Tertiary Student Subsidy Funding?

ETSSF is an online payment made by the LLGs to assist the parents in financial factor for their children who attend high institution. The fund is a public fund from the government allocate for the student.

## What are the functionalities of the ETSSF?

ETSSF is the online system for the LLGs staff and the District Headquarters Staff that will be running on the desktop application and web application. The LLGs staff will use the desktop application to fill up the Student application Form or update the student detail on the Form then submit. The student data will be stored in the student database then the web application will retrieve the information in the database which will be viewed by the hand- user.

The SOAP (simple object Protocol) allow the web server running on the hand-user computer using XML (extensible mark-up language). The hand-user can invoke web service and receive response since HTTP is installed and running in all operation system. The hand-users are the District Headquarter staffs that will view the Tertiary Student summary which the system will automatically create the total amount to be paid, list of student per institution then it can make an online payment or produce a cheque.

Figure 1: illustrate the how the propose system process information.

Previous Project

Many countries have the FSFS system in the form of grant financial assistance and loan financial assistance but contradict in some measures applied by their government in Education sector. Apart from all the countries, Hong Kong has the similar project like the ETSSF which is managed by the studentfinanceoffice abroad the nation (Student Finance office, 2015 & 2018, page 1).

Benefits

When implementing the system in the District Level, there are some benefits the ETSSF will provide such as;

Reduce the transport cost- currently the transportation cost to the District headquarters from the different LLG is too costly because the district is in the remote areas where people a scattered apart from each other.

All student will be registered- Everything will be done on time as schedule that will benefit the student especially during the registration week.   
Reduce Time consuming- application will be used to create application form to record student details, that will be stored in the database, then web application retrieve and manipulate it via network for the District staff to view student record rather than the manual system

Conclusion

Therefore, ETSSF is the system that will be implemented in the District Level to help the LLGs staffs and District Headquarters deal with subsidy funding for the Tertiary Student on time. The application will create accessibilities between the LLGS and the Headquarters.

Proposed solution

Description

The Electronic Tertiary Student Subsidy Funding will have the desktop application and web application for the Pomio District Staff to access the system. ETSSF is a newly subsystem of TSFS that propose for the District level to access it whereas for the TSFS is a broad system for the whole country.

The LLG staffs will use the desktop application to record the student details and update the student information. Regarding the confirmation purposes the system will verify the student to the District Database to prove if he or she is a citizen of Pomio. The hand user are the District staff such as the District Administration, Member of Parliament (MP) and Finance officer will use the web application to view the student detail, total number of student, list of student in each university, total subsidy funding, and provide fees payment option for the finance officer to either make the payment online or cheques payment. The system will provide the online payment accessibility and it also can produce a cheque.

The ETSSF will automatically calculate the total fee and produce a list of the student under the university that they will be attended. The system will also keep record of how many student the District has been assisted with Funding scheme.

ComponentsThe ETSSF system will include two external users, the LLG staffs and the Headquarter staffs. The desktop application and web application will be used to help the LLGs staff record and update student details. The District Headquarters staff will be able to view all the details which will be automatically generated by the system. The ETSSF will also allow the financial staff to do the payment either online or cheque payment which the cheque will be generated by the system also.

4. 2. 1 Context Diagram

Figure 2: The diagram above show the information from the staff to the propose system and from the propose system to the District

Headquarters staff.

5. Methodology

5. 1 Project framework

Tertiary Student Financial scheme is the large system practice in many developed countries online and also practice in Papua New Guinea manually. ETSSF is a subsystem of the TSFS and is a newly propose system that will be established in the district level. However, the propose system is an online system rather than manual system. The newly propose system will be developed using the iteration system development approach.

The basic idea behind this method is to develop a system through repeated cycles (iterative) and in smaller portions at a time (incremental), allowing software developers to take advantage of what was learned during development of earlier parts or versions of the system (Wikipedia, 2018, para 2). After the system being implementedfailuremay be identify and the system should be updated in the future.

The diagram below show the development of the propose system model using iteration system approach over the SDLC.

Figure 3: show the iteration system approach which the propose system will be developed upon.

Technologies

The different technologies the propose system will be using are;

Visual Studio. Net (2013/2010) C# or C++ - visual Basic is a technological tool use to create the desktop application for the data recording and updating. Object-oriented programming can be apply to produce the desktop application.

Workbench MySQL and XAMPP server- is a server that store all the student record in the student database. It can be run on the web server in the datacentre for the district.   
ASP. Net – is atechnologytool use to support or create web application to make it possible for the district headquarters by creating its website. It will be used to create the website of the system.

Tentative schedule

The propose system will be done according to the schedule below.

Figure 4: show the schedule of the propose project in the iteration life cycle. If the system is test and encounter a problem then analyse the system again and repeat the whole process until the final system is complete.

Key deliverables

The Propose system key deliverable after completion is to deliver;   
Accessibility for the student to apply for the Subsidy funding and the Headquarters Staff to access the student application form.   
Transparency which will avoid wantok system or nepotism meaning no non-Pomio citizen will be subsidize under the District Fund due to their relative working in the LLGs.   
Time managementwhich all task perform in a given time and finished off on a given time as schedule.

### Glossary

1. ETSSF (Electronic Tertiary Student Subsidy Funding) - is a government sponsorship financial scheme online system for the District level to financially assist Tertiary student in the district.
2. Granted financial Assistance- the government assistance of the student that cover tuition fee, academicexpense, and compulsory union fee.
3. Incremental development- a development approach that completes parts of a system in several iteration and then puts them into operation for users.
4. Iteration- System development process in which work activities-analysis, design, Implementation are done once, then again and yet again on different system components; they are repeated until the system is closer to what is ultimately needed
5. Loan financial Assistance- is the government assistance of the student but it has a living expenses, meaning student will pay interested –bearing which the government set per annum chargeable from the commencement of the repayment period.
6. TSFS (Tertiary Student Financial Scheme) - Is a public-funded program that provide financial Assistance to the student in the form of loan and granted which is administered by the Government student finance office.

## References

* Provide reference list of sources you have used to develop this document. Use APA referencing style Iterative and incremental development. (2018). Retrieve July 1, 2018, from Wikipedia: https://en. wikipedia. org/wiki/Iterative\_and\_incremental\_developmentStudent Financial Office. (2015 & 2018). Hong Kong: Tertiary
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