Information System Analysis & Design on

GOVERNMENT ACCOUNTING SYSTEM IN RAJSHAHI

(Selected Office: Divisional Controller of Accounts Office, Rajshahi)

Course Title: Sessional Based on CSE 4107
(Information System Analysis and Design)

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GROUP MEMBERS:

- Swati Kar (133095)
- Md. Iftekharul Islam (133096)
- Md. Rezaul Karim (133097)
- Zannatul Mohwa Jabin (133098)

Presented by:

SWATI KAR
(133095)

INTRODUCTION

The **Divisional Controller of Accounts (DCA) (বিভাগীয় হিসাব নিয়ন্ত্রকের কার্যালয়, রাজশাহী)** office performs the accounting function of the government in Rajshahi. The accounting functions of this office include keeping government accounts and maintaining general financial statements.

RECOGNITION OF NEED

Problem Identification:

As an accounting system, managing different types of accounts and statements is the fundamental task. The main problems that were found are

1

IT skills of the staff

2

Data inconsistency between the DCA office and Bangladesh bank

3

Backdated bill form

INFORMATION GATHERING

THE ORGANIZATION

Goal

Payment of pay and allowances of all government offices and preparing accounts of all government transactions in Rajshahi division at the month end.

Policies

- Online and manual bill submission as per schedule

- Online reporting and monitoring system to check outstanding bills

- Works assigned to different positions

Objectives

- Providing service to the audit offices

- Fixing and paying salaries of the employers and employees of different government office

- Administration & payment of pensions
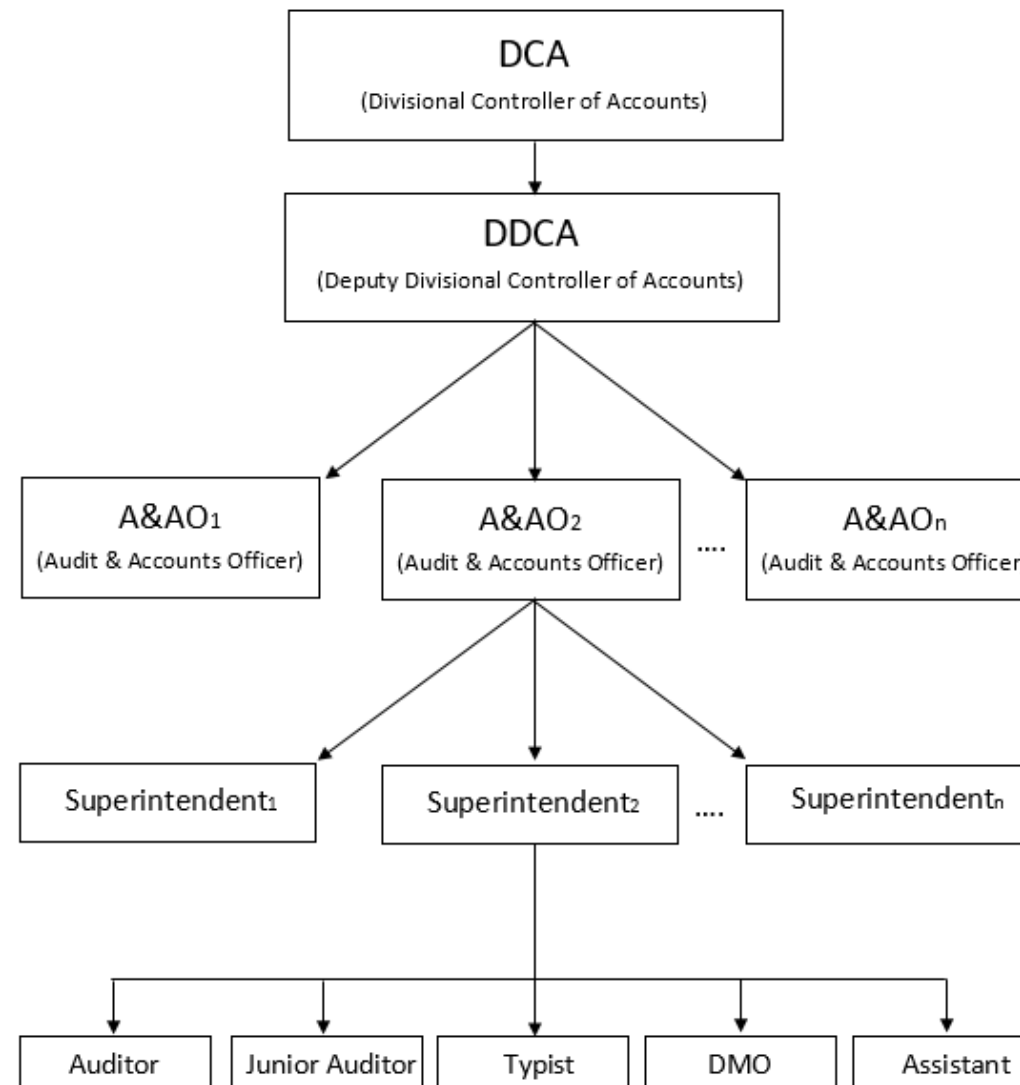
INFORMATION GATHERING

*Fig.1: **Organization Structure***

Presented by:

MD. IFTEKHARUL ISLAM
(133096)

INFORMATION GATHERING TOOLS

Review of Literature, Procedures and Forms:

They are used to evaluate how well the objectives are met. We managed to collect service profile handbook (Fig.1), reference list of officers and some samples of bills.

On-site Observations:

The following observation methods were used for our purpose:

- *Natural:* The observation occurs in the employee's workplace.
- *Obtrusive:* The employees knew that they were being observed.
- *Direct:* We physically observed the system at work.
- *Unstructured:* We observed whatever might be pertinent at the time.

INFORMATION GATHERING TOOLS

Interview:

Interviews are required to properly understand people's perceptions, feelings and motivations. We arranged the interview in the DCA office. Some of the questions asked were-

- ➢ What is the goal of this organization?
- ➢ What are the policies followed to meet the organization's goal?
- ➢ Can you briefly tell us about the overall structure of the office?
- ➢ How many sections are there in the office?
- ➢ Does this office work independently?
- ➢ What is the relationship of this office with other govt. offices?
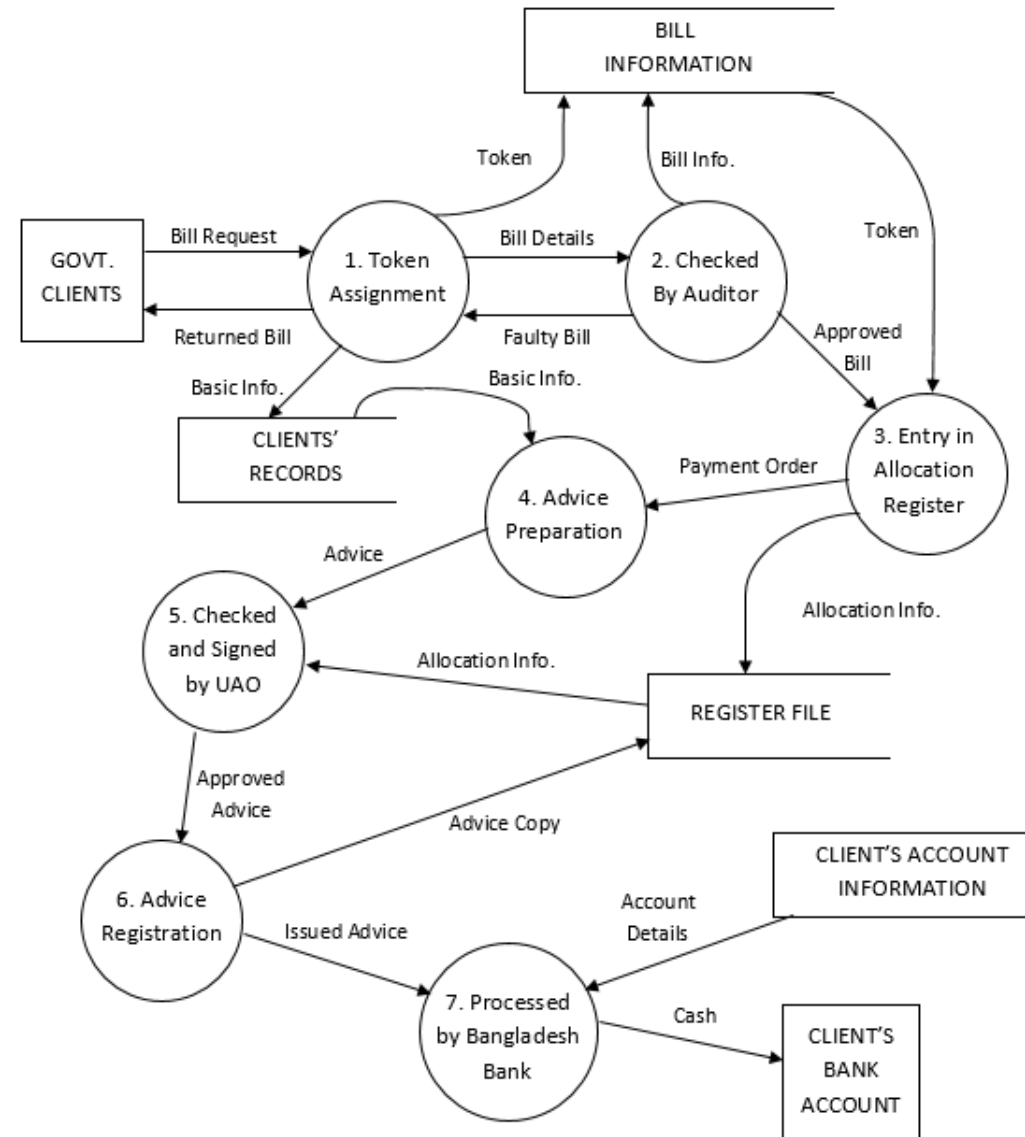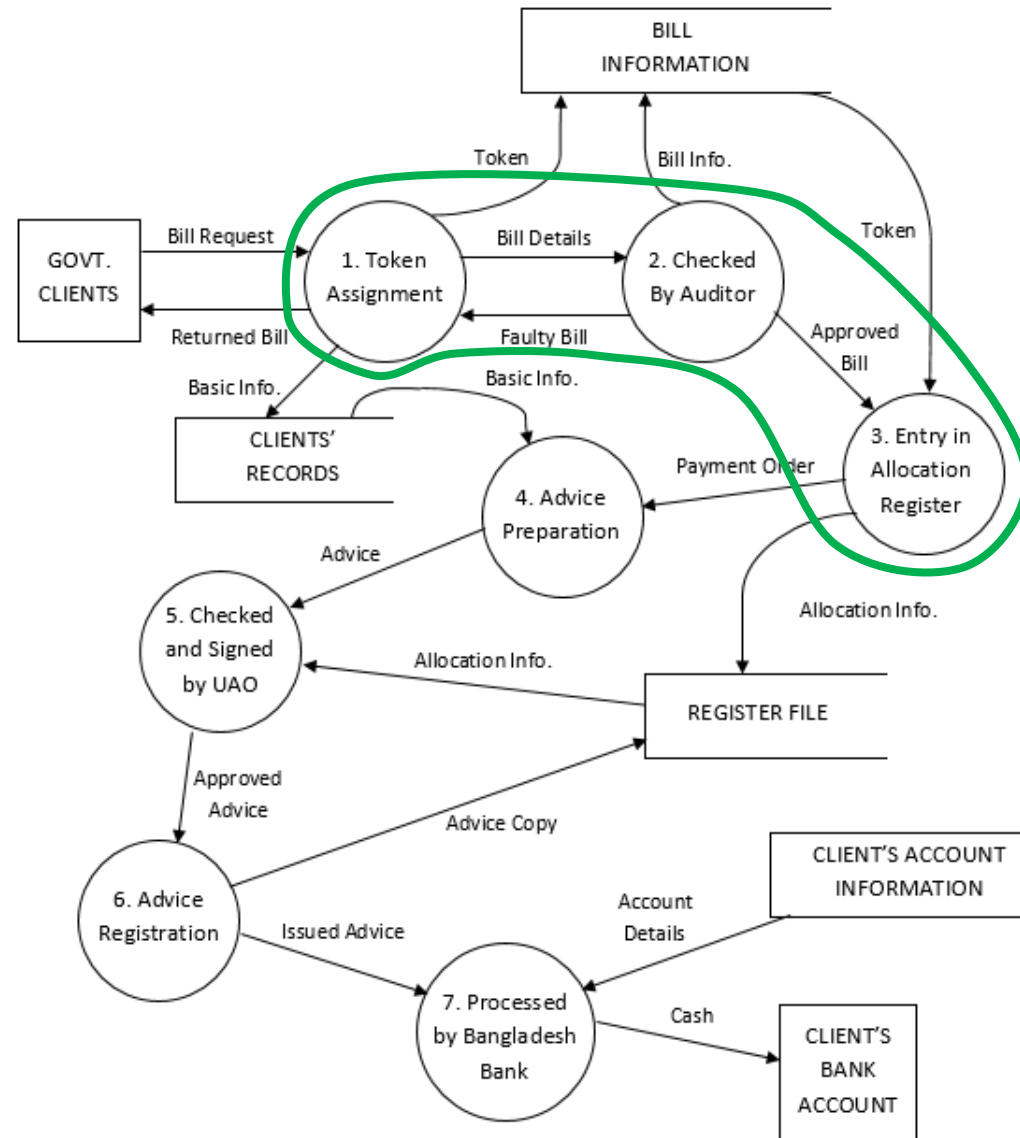
TOOLS OF STRUCTURED ANALYSIS

Fig.2: **Data flow diagram of the existing system**

TOOLS OF STRUCTURED ANALYSIS

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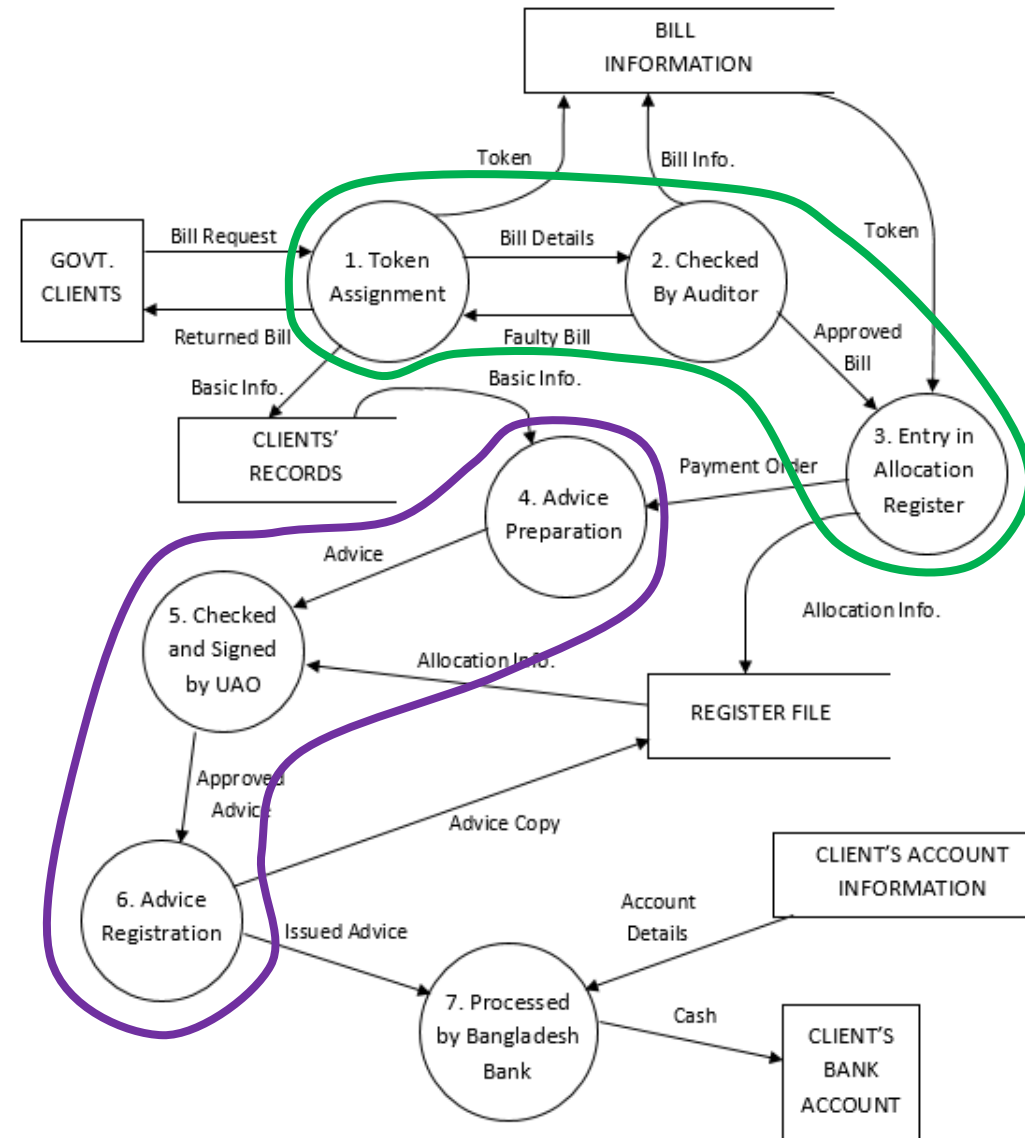# TOOLS OF STRUCTURED ANALYSIS

Fig.2: **Data flow diagram of the existing system**

TOOLS OF STRUCTURED ANALYSIS

Fig.2: **Data flow diagram of the existing system**

Information System Analysis & Design
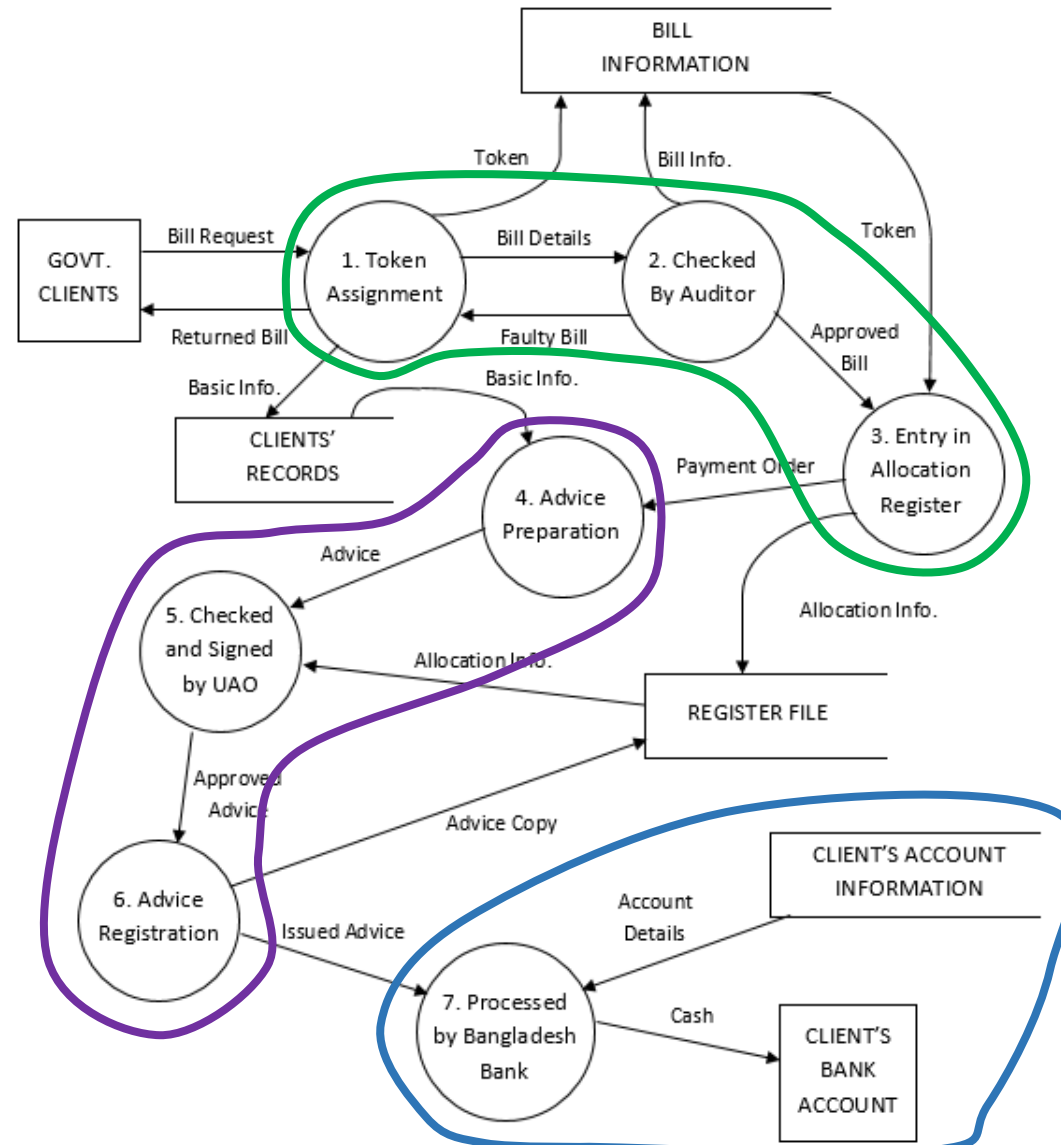
Presented by:

MD. REZAUL KARIM
(133097)

PROPOSED CANDIDATE SYSTEM

Key Points of the Candidate System:

✓ Deployment of a new section that works as an interface between the organization and Bangladesh Bank.

✓ Launch of training program for the employees to increase computer skills.

✓ Ensures a more efficient system.

✓ Less wastage of time and resources.

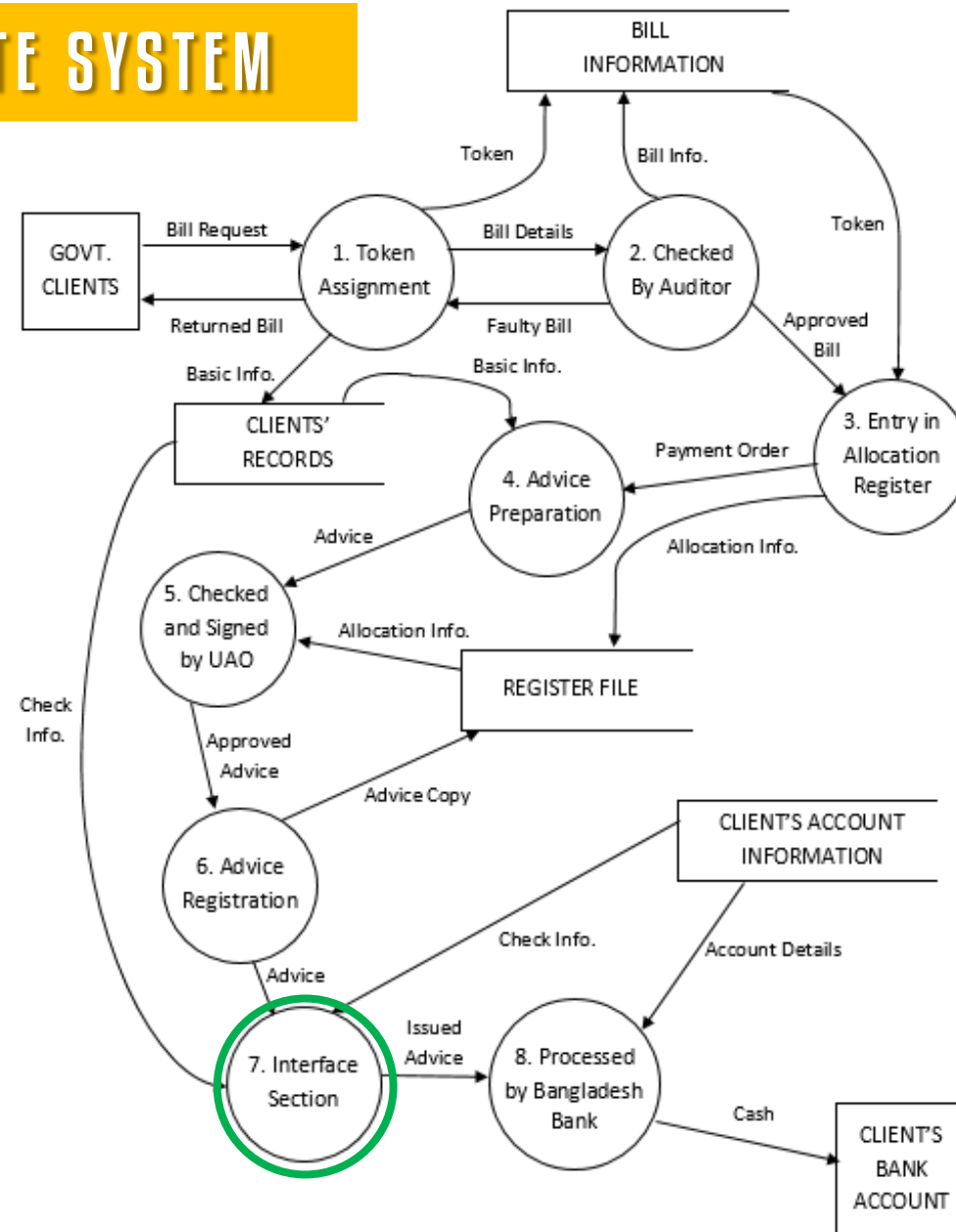✓ Saves the clients from extra hassles.

PROPOSED CANDIDATE SYSTEM

*Fig.3: **Data flow diagram of the candidate system***

FEASIBILITY STUDY

Following questions are related to the design of the candidate system:

1. Is there a new and better way to do the job that will benefit the client?

Answer: Yes. Some changes can be brought to make the client's work easier and efficient.

2. What are the costs and savings of the alternative?

Answer: Initially there will be some additional costs since some new facilities will be added. But after implementing the candidate system, it will save more time and resources in the future.

3. What is recommended?

Answer: We recommend that a new section be facilitated and a computer training program be launched for the user staff.

FEASIBILITY STUDY

Table 3.1 : Candidate Qualities Evolution Matrix

Evaluation Criteria	Candidate system	Current system
Performance :		
i) Accuracy	Excellent	Good
ii) Growth potential	Excellent	Very Good
iii) Response Time	Very good	Good
iv) User friendly	Very good	Very Good
Cost:		
i) System development	Very good	Good
ii) User training	Excellent	Good
iii) System operation	Very good	Very good
iv) Payback	Excellent	Fair

FEASIBILITY STUDY

Table 3.2 : Weighted Candidate Evaluation Matrix:

Evaluation Criteria	Weighting Factor	Candidate system		Current system	
		Rating	Score	Rating	Score
Performance:					
i) Accuracy	5	5	25	3	15
ii) Growth potential	2	5	10	4	8
iii) Response time	4	4	16	3	12
iv) User-friendly	4	4	16	4	16
Cost:					
i) System development	3	4	12	3	9
ii) User training	4	5	20	3	12
iii) System operation	4	4	16	4	16
iv) Payback	3	5	15	2	6
			130		**94**

Presented by:

ZANNATUL MOHWA JABIN
(133098)

COST/BENEFIT ANALYSIS

- ✓ Cost/benefit analysis gives a picture of the various costs, benefits and rules associated with a system. When new systems are proposed, the cost is a major consideration which impacts on the decision to accept or reject the proposed system.

- ✓ In developing costs estimates of the candidate system for the DCA office, Rajshahi, several cost elements are to be considered. The system is also expected to provide benefits.

COST/BENEFIT ANALYSIS

Table 3.3 : Cost Analysis of the Candidate System

Cost Category	Cost Elements
Hardware cost	Computers, printers (*Tangible, Direct, Fixed*)
Personnel cost	Salaries and vacation time of Supervisor, Auditors, Accounts managers (*Tangible, Direct, Fixed*)
Facility cost	Desks and chairs, air conditioning (*Tangible, Indirect, Fixed*)
Operating cost	Day-to-day costs (*Tangible, Direct/Indirect, Variable*)
Supply cost	Files, papers, ribbons (*Tangible, Indirect, Variable*)

COST/BENEFIT ANALYSIS

Benefits Obtained From The Cost Elements:

✓ The proposed interface section will provide synchronization between the DCA office and Bangladesh Bank. Thus the clients will get a more reliable service and be saved from hassle.

✓ The hardware costs for the computer training lab will make the employees more skilled in computer use.

✓ With proper computer skills, the employees will be able to perform more tasks in less time.

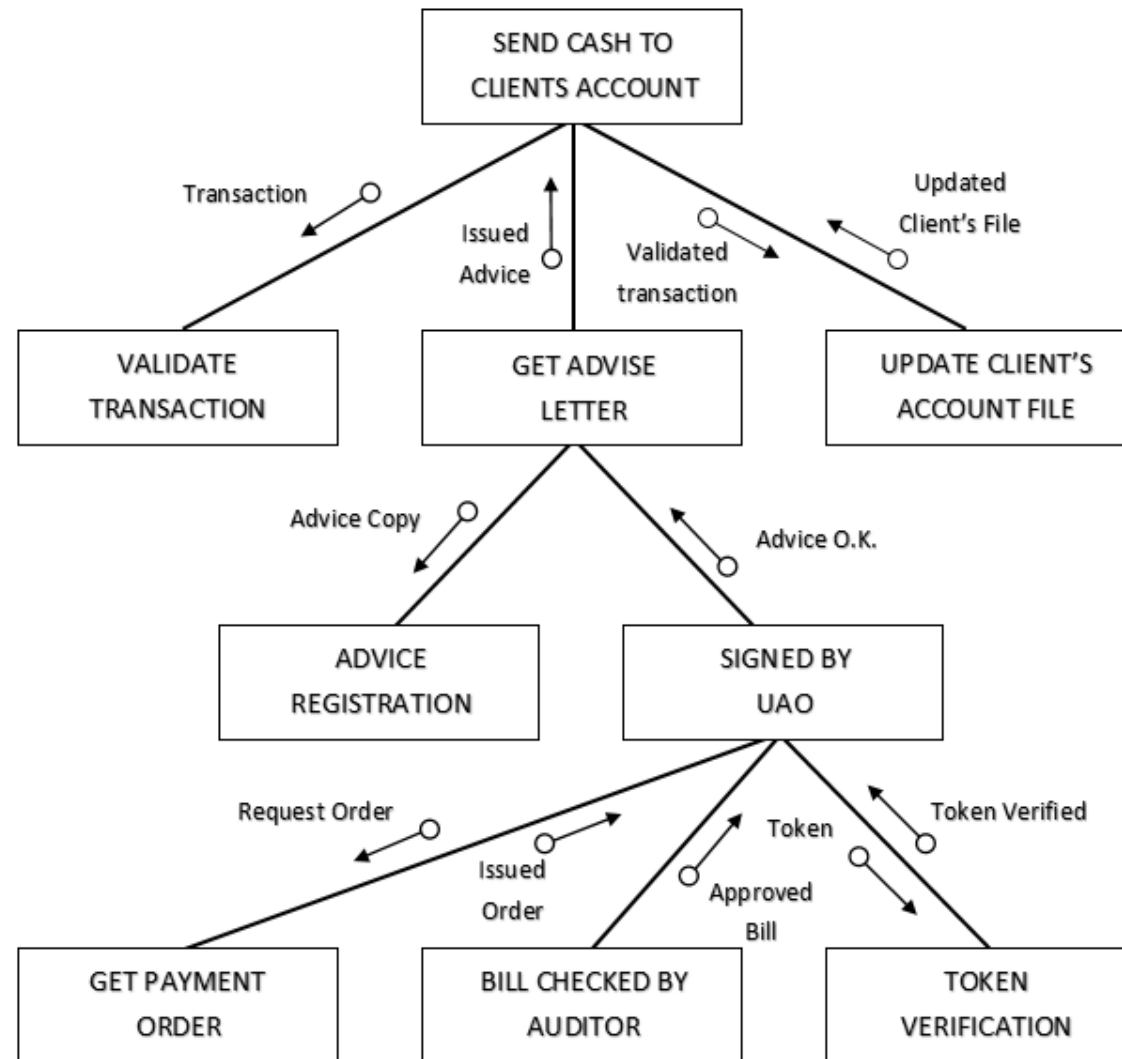✓ The overall efficiency of the system will increase.

STRUCTURED DESIGN

*Fig.5: **Structure chart***

THANK YOU