

## FINANCIAL DATA MANAGEMENT INFORMATION SYSTEM FOR THE UMRAH AND HAJJ CONGREGATION

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### Article history:

Received December 14, 2020  
Revised March 4, 2021  
Accepted April 7, 2021

**Keywords:** Administration;  
Financial Management;  
Umrah;  
Hajj.

### Abstract

Recording data on congregation and finances on Travel AJA is currently still using the manual method, namely by recording on a ledger. The manual data entry process caused difficulty in the data search process, and this became a problem in Travel AJA. The research method used in this research is literary study, and field research such as observation, interviews, and documentation. The system development methodology used is waterfall, where stages carried out in the research is requirement analysis, design, coding, and testing. With the development of this system, congregation only need to confirm congregation installment and payment processes that have been made to the system. Congregation who have paid the Umrah or Hajj fees will get proof of installments and can be printed by the congregation. The development of this information system will make the process of hajj and umrah installments more efficient

### 1.0 INTRODUCTION

In the current era, the development of information technology is growing rapidly [1], one of the benefits is digitizing the process which is manually [2][3][4]. The recording of congregation and finance data at the Umrah and Hajj AJA Travel still using storage in a ledger. It is difficult to add new data to the ledger, and also takes a long time looking for congregational data. Besides, Adding congregational of Umrah and Hajj data requires a lot of paper, because the entry data process of the congregation still using notes, therefore often mixed with other congregational data according to the date the congregation registers so that when adding new data it will take time to write on a new page.

In order to become a candidate for the Hajj and Umrah congregation, it is required to make Installment payments by transferring installment money to the s office by selecting a supporting bank that has been provided from the head office. After transferring the installment money, the congregation sending proof of transfer of installments of Umrah and Hajj to AJA Travel. Then the company will copy 2 pieces of proof of transfer. 1 sheet for proof of branch office. 1 sheet for proof of payment to the head office. In this case, proof of installment is stored using a folder and with a photocopy of evidence. Which allows data and proof of transfer can be lost. Storage of registration data and proof of installment still uses a folder and is placed in a cupboard. This requires a lot of space and in searching the data it also takes time, by sorting the name of the registration data according to the date of registration in the storage cabinet. And the installment storage is stored in the folder by sorting the names of the congregation distinguished from the registration folder. The risk of losing registration data is very high, such as

fires, floods, natural disasters and the risk of data mixing between one congregation and others [5].

Ramadina and Hadi have conducted research in the development of a workshop management information system where the results of this development have received good ratings from users and the application can run as determined [6]. The development of an information system was also carried out by Kurnianda and Sari where the results of the research conducted could provide the information needed for diabetics [7]. Salamah and Purnomo have also developed an information system for cooperatives which was previously carried out using Microsoft Excel. The results of the research conducted can make transactions more effective and efficient [8]. Sugianto and Aulia have also developed information systems, where the information system developed can assist in the preparation of a cooperation statement document [9]. Fariza, Asmara, and Ilhami have also conducted research to develop an application to solve the problem of riding a suroboyo bus. By developing a digital waste transaction application, it will help the performance of each party to be more effective and efficient [10]. Based on previous research, the development of financial management information systems for Umrah and Hajj Congregation is expected to help Travel AJA manage their finances.

## **2.0 THEORETICAL**

### **2.1. Financial Management**

Financial management is planning, directing, monitoring, organizing, and controlling the financial resources of an organization efficiently and effectively to achieve organizational goals. The purpose of this financial management is so that we avoid more debt than income. The definition of financial management is all forms of administrative activities carried out in the form of several stages which include: planning, storage, use, recording and supervision which then ends with accountability (reporting) for the outflow of funds / money in an agency (organization or individual) at a certain time [11].

Financial management is the management of the financial function. The following are the three main activities (functions) related to financial management [12]:

- Allocation of funds is an activity to invest funds in various assets. Allocation of funds is in the form of financial assets or a piece of valuable paper that has market value because it has the right to earn income, for example: stocks, certificates of deposit, or bonds, real assets, namely real assets: land, buildings, equipment.
- Raising of funds is activities to obtain funds from both internal sources and external sources, including dividend.
- Manajemen assets is after the funds are acquired and allocated in the form of assets, they must be managed as efficiently as possible.

### **2.2. Hajj and Umrah**

Hajj is an act of worship carried out by visiting the Baitullah in Mecca sincerely hoping for the pleasure of Allah with certain conditions and pillars. Performing the Hajj is performing the fifth pillar of Islam, and it is an obligation for every able Muslim to perform Hajj. Umrah literally means pilgrimage (to visit). Everyone can perform Umrah at any time outside the Hajj season [13].

## **3.0 RESEARCH METHODOLOGY**

The waterfall method consists of 5 stages, namely requirement analysis, design, coding, and testing [14]. The following is an explanation of the waterfall stages in this study.

### **a. Requirement Analysis**

At this stage, data collection and determination of system requirements are carried out. In this case, data collection is done by observing, interviewing and studying literature. Observations made by direct observations on the object of research. Meanwhile, interviews were conducted with AJA Travel to ask about the process of financial storage. In addition, conducting literature studies or looking for theoretical references relevant to this research. References are used from books and research articles relating to the development of information systems. After collecting the required requirements, the next step is to analyze the requirements obtained. The analysis results obtained will be used for the development of the Financial Data Management Information System.

### **b. Design**

At this stage, it is a translation of the needs or data that has been analyzed for the Financial Data Management Information System on AJA Travel which will be built such as designing a database using MySQL and designing a user interface or system display into a form that is easily understood by users.

c. Coding

At this stage the design that has been made in the previous stage will be translated into a programming language. The programming language used in this research is PHP, and the database used is MySQL.

d. Testing

In the final stage, the developed Financial Data Management Information System will be tested. The testing technique used in this research is Black Box. Testing is done to fix bugs found, so that the system being developed can function as expected.

#### 4.0 RESULTANTS AND DISCUSSION

##### 4.1. Analysis of Current System

The following is a business process that is currently running at Travel AJA

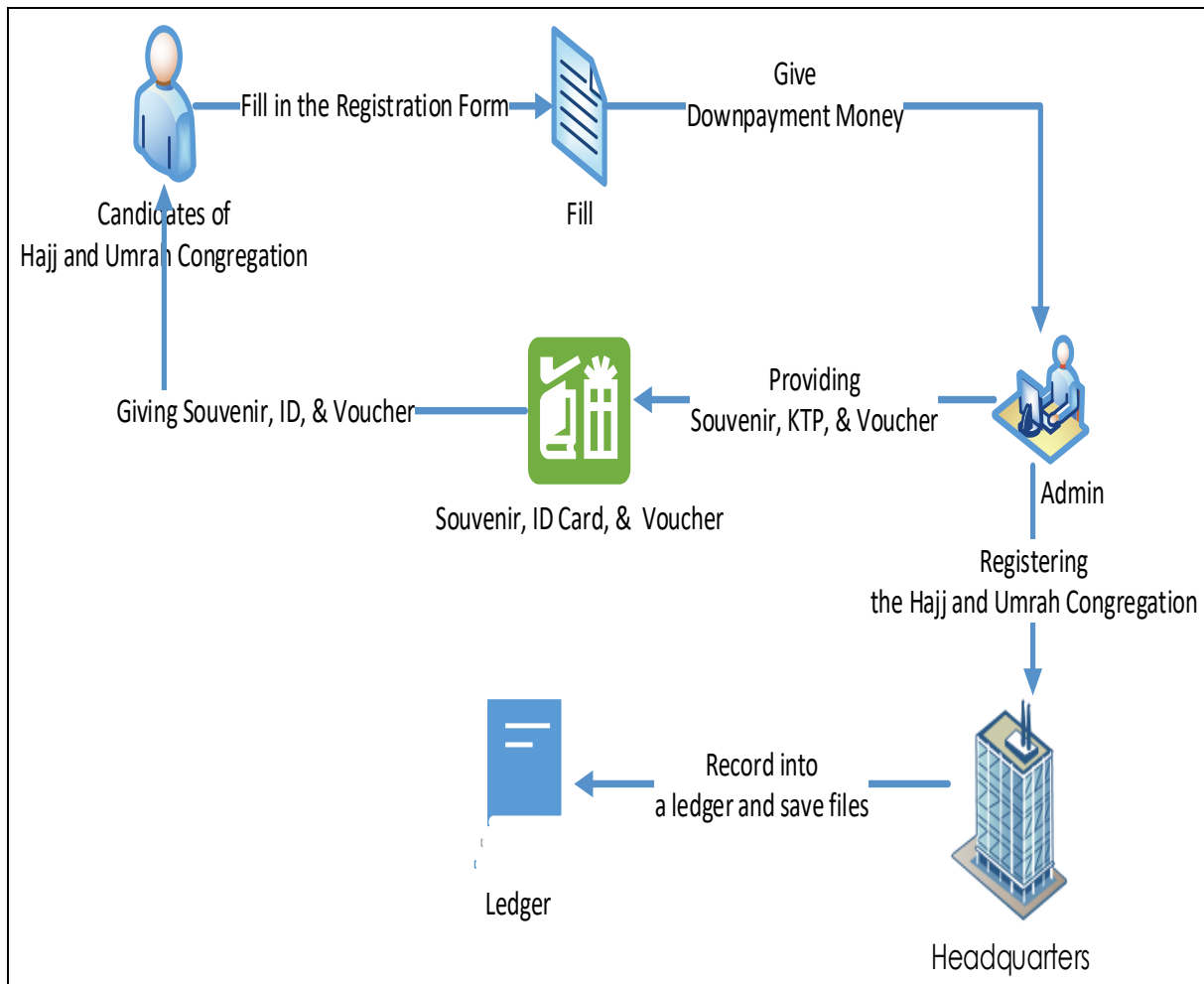


Figure 1. Flow map of Running System

Based on the results of observations and interviews conducted at Travel AJA, it can be concluded as follows:

1. Each congregation who registers will fill out a written form then sign and provide down payment or registration fee as a condition of registration.
2. The admin will register congregation who have filled out the form and provide down payments to the head office.
3. After registering with the company, the congregation will get souvenirs in the form of koko or mukena clothes, ID cards and vouchers as proof of Umrah and Hajj installment fee.
4. Admin will record the registration and payment of installments that require a lot of forms and write it into a ledger.

### 4.3. User Interface

Based on the analysis of the problems that have been carried out, the system design is being developed

Nomor admin	Nama Lengkap	Email	No Telepon	Status Admin	Aksi
1	Jhon	admin@gmail.com		Online	Edit Hapus
2	Jelo	manager@gmail.com		Online	Edit Hapus
4	Jeje	jeje@gmail.com	081212786663	Online	Edit Hapus

Figure 2. Page List of Admin

Admin is a user who can access all menus related to congregational data. The Page List of Admin can only be accessed by the Admin Master. This page displays a list of admins on the developed system. Hajj and Umrah travel Admin Master can add, edit, and delete admins through this page

Nomor Jamaah	Nama Lengkap	Email	No Telepon	Aksi
22012017	Zaki Ananda	Zaki@gmail.com	089604038338	Detail
16201706007	Joe	jhony@dgmail.com	089604038338	Detail
15201706007	Ananda Arsinta	anandaarsintaa@gmail.com	0858123789	Detail
4201706006	Bella Astuti	astuti@gmail.com	5419482	Detail

Figure 3. Page List of Hajj and Umrah Congregation

Figure 3 displays Page of Hajj and Umrah congregation data registered in Travel AJA. Admin can input Hajj and Umrah congregation data into the system, if the Hajj and Umrah congregation have filled out forms and paid downpayment money

Nama bank	No Rekening	Aatas Nama	Aksi
BCA	7510172820	PT. ARMINAREKA PERDANA	Edit Hapus
BNI	0147752748	PT. ARMINAREKA PERDANA	Edit Hapus
BRI	052801000088303	PT. ARMINAREKA PERDANA	Edit Hapus
MADNIRI	1560001408550	PT. ARMINAREKA PERDANA	Edit Hapus
MANDIRI	1560001408550	PT. ARMINAREKA PERDANA	Edit Hapus
MANDIRI SY	0690038383	PT. ARMINAREKA PERDANA	Edit Hapus

Figure 4. Page List of Bank

Figure 4 displays list of banks that can be used for Hajj and Umrah expense installments. On this page the Admin can add, edit and delete existing data of bank.

Nomor Jamaah	Nama pemilik rekening	Bank tujuan	Bank asal	Nomor rekening	Jumlah	Aksi
4201706006	Bella Astuti	BCA	BCA	1831947	5000000	Sukses
4201706006	Bella Astuti	BCA	BCA	1831947	7500000	Sukses
4201706006	Bella Astuti	BCA	BCA	1831947	9650000	Sukses
4201706006	Bella Astuti	BCA	BCA	1831947	96000000	Sukses
16201706007	31233	MADNIRI - 1560001408550	bca	322222323232	30	Sukses
4201706006	Bella Astuti	BCA - 7510172820	BCA	0690038383	8500000	Sukses
4201706006	Bella Astuti	BCA - 7510172820	BCA	7510172820	8000000	Sukses
4201706006	Bella Astuti	BCA - 7510172820	BCA	7510172820	458000	Sukses

Figure 5. Page of Confirmation Data

Figure 5 displays page for confirmation of payments that have been made. This page is a confirmation of the installments made by the Hajj and Umrah congregation. Admin can confirm payments made by customers after registering to head office.

Nama Paket	Jumlah orang perkamar	Harga	Aksi
Haji Plus Arbain 26	2	Rp. 127,205,000	Edit Hapus
Haji Plus Non Arbain	0	Rp. 127,205,000	Edit Hapus
Plak plak	3	Rp. 30,000	Edit Hapus
Umroh Arofah 9 Hari	0	Rp. 34,814,000	Edit Hapus
Umroh Mina 9 Hari	0	Rp. 26,780,000	Edit Hapus
Umroh Paket Makassar	0	Rp. 29,458,000	Edit Hapus
Umroh Paket Medan	0	Rp. 27,449,500	Edit Hapus
Umroh Paket Muzdhalil	0	Rp. 22,763,000	Edit Hapus
Umroh Paket Padang	0	Rp. 25,106,250	Edit Hapus
Umroh Paket Safa	0	Rp. 29,458,000	Edit Hapus
Umroh Paket Surabaya	0	Rp. 28,587,650	Edit Hapus
Umroh Plus Aqsa	0	Rp. 41,509,000	Edit Hapus
Umroh Plus Turki	0	Rp. 38,161,500	Edit Hapus

Figure 6. Page of Data Package

Figure 6 displays Umrah and Hajj packages that have been inputted by the Admin. On the page of data package, you can also add package data, delete and edit the price of existing package data.

Pilih Prodide Bulan:

Pilih Priode Tahun:

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**LAPORAN KEUANGAN**

No	Kode User	Nama Lengkap	Tanggal Transfer	Jumlah Uang
1	4201706006	Bella Astuti	2017-04-06	8000000
2	4201706006	Bella Astuti	2017-04-07	458000

Figure 7. Page of financial statements

In Figure 7 displays the financial report page of the congregation. On this page, the admin can view reports by month and year. After the admin chooses by month or year, the congregation's financial reports will appear.

### 4.3. Testing

Testing of the system design is carried out using the black box testing method. Black-box testing is a method of testing software that is oriented towards system functionality. This test is carried out by providing input to the system so that it gets the desired output.

Tabel 1. Testing Scernario

No.	Testing Scenario	Test result	Conclusion
1	Choose Page of Confirmation Data	Displays the financial confirmation data page	Success
2	Choose Page List of Hajj and Umrah congregation	Displays the page of Hajj and Umrah congregation List	Success
3	Choose Page of Data Package	Displays the Page of Data Package	Success
4	Choose Page List of Bank	Displays the Page List of Bank	Success
5	Choose Page of financial statements	Displays the Page of financial statements	Success

Based on the results of tests that have been carried out on this application, it can be concluded that the application runs according to the needs and no one experiences errors, the buttons run according to their function, and the application runs according to design.

### 5.0 CONCLUSION

So far, the registration process for Travel AJA uses forms and records using a ledger. In the storage of the forms the congregation has registered are stored in folders in a cupboard which takes up a lot of space. The storage process in the folders is of course at risk of being lost. With this application, congregation only need to inform the installment and payment to the system. After that the admin will confirm the installment transfer and the payment of the congregation's

money to the central company. With the development of this information system, the process of hajj and umrah installments more efficient.

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