

## Application of Framework for the Application of System Thinking Method in Marketing Systems at AP Studio Palembang Based on Website

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### Abstrak

Today's marketing system has become a necessity for most companies in improving the quality of service to customers and progress for the company itself. As a company engaged in the service sector, in this study, a website-based marketing system will be built that can be used by customers to order or reserve. So as to facilitate and provide convenience for customers in using the services of this company. In addition, this system also presents questionnaires intended for customers so that the level of customer satisfaction can be known and is useful to improve the quality of service better. In implementing this marketing system, this system was developed using the FAST (Framework For Application Of System Thinking) method which has stages in accordance with the system to be built.

Kata kunci: Marketing System, FAST (*Framework For The Application Of System Thinking*), Website.

### 1. INTRODUCTION

The development of Information Technology (IT) has now become one of the elements in life. As we know, that the progress of information technology does have a very significant impact on the pattern of human life. With its development, the work and problems we face today are more easily solved, including in marketing goods and services for a company.

Alemio Production (AP) Studio is a company that provides Photography, Videography and Creative Project services that produce a product in accordance with these services. Based on current needs, Photography, Videography and Creative Projects are in great demand by almost every circle, both within the scope of companies, businesses, events and others. Since each group has different service needs, the company provides services with different categories such as family photos, wedding photos and videos, presenting student moments at school and so on. This must be offered in groups, so that it is easier for customers to find the photo or video services they need at that time.

Currently the AP Studio company markets its services through social media, so the categories of services offered and promoted in the form of photos and short videos are often covered or displaced by other promotions. These things can make information about company services hampered to be known by customers and prospective customers. Similar to booking a time to use company services, customers usually do it indirectly via cell phone or social media itself, not even a few customers who come directly to the studio so that if on certain holidays such as graduation days of a college, it will be queue which takes a long time. Therefore we need a system that provides information about photo or video services that can be ordered at a later time by the customer. This is done to strengthen the relationship between the company and customers that can affect the progress of the company itself. From the problems that have been explained, then to overcome these problems we need a system that can display detailed information about the types of services and can be ordered by customers to be used later and a system that can store customer data that will be used for

price cuts and information about customer satisfaction. The systems needed will be combined into one system, which is a marketing system that can be accessed via the web. Systems development method Framework for the Application of System Thinking (FAST) is a method that applies analysis of problems in business processes that occur in an organization or company, the authors apply this method because it fits in a marketing system. Therefore, the authors are interested in taking the topic of marketing systems with the title "**Application of Framework for the Application of System Thinking Method in Marketing Systems at AP Studio Palembang Based on Website**".

## 2 LITERATURE REVIEW

### 2.1 Marketing

According to Jacob (2012: 1), "The system is a network of related procedures, gathered together to carry out an activity or a specific purpose".

According to Andalia (2015: 94), "The system is a network of procedures that are interconnected, gathered, together to carry out an activity or to complete a certain goal."

### 2.2 Metode Framework for The Application of System Thinking (FAST)

According to Whitten and Benley in Wibisono (2017: 21), the Framework for Application of System Thinking (FAST) is an intelligent framework that is flexible enough to provide different types of projects and strategies and contains a combination of practices using system development methods that are can be found in many reference and commercial methods.

The FAST method defines the stages to identify problems, opportunities, obstacles that occur, and expected needs so that improvements can be proposed. In this method, there are eight stages of development in the FAST method, namely:

#### 1. Scope Definition

At this stage, the researcher collects information that will be examined through interviews to determine the scope of the project and the initial scope of the system

using a framework of PIECES (*Performance, Information, Economics, Control, Efficiency, Service*).

#### 2. Problem Analysis

At the Problem Analysis stage, problems that arise in the existing system will be analyzed and studied the company's business processes. The result of this stage is an increase in system performance that will provide benefits in terms of the company's business, and a report in the form of information about problems, causes, effects, and solutions benefits.

#### 3. Requirements Analysis

At this stage, defining the requirements needed by the user to be applied to the new system will be created by analyzing functional and non-functional requirements. The purpose of this stage is to identify the data, processes and interfaces that the user wants from the new system. At this stage you can determine the requirements in a new system.

#### 4. Logical Design

The purpose of this stage is to transform business needs from the Requirements Analysis phase to the system model that will be built later. This phase will answer questions about the use of technology (data, process, interface) that guarantee usability, reliability, completeness, performance, and quality that will be built on the system. At this stage, the results of the needs analysis will be translated into a system design such as use case diagrams, activity diagrams, class diagrams, and sequence diagrams.

#### 5. Decision Analysis

At this stage, the researcher will consider several candidates for software and hardware that will later be selected and used in the implementation of the system as solutions or problems and requirements that have been defined in the previous stages. Researchers will also estimate the time needed to make the system.

6. **Physical Design**  
The purpose of this stage is to transform the business needs represented as logical designs into physical designs which will later be used as a reference in making the system. At this stage, researchers will conduct interface design and application design details.
7. **Construction and Testing**  
After creating physical design, it will begin to construct and carry out the testing phase of the system that meets business needs and design specifications. Databases, application programs and interfaces will begin to be built at this stage. After testing the entire system, the system is ready to be implemented.
8. **Installation and Delivery**  
At this stage the system that will be built will be operated. This stage will start by downloading the software to provide training to the user on the use of the system that has been built.

### 3 RESEARCH METHODOLOGY

#### 3.1 Data Collection Techniques

Dalam penyusunan Tugas Akhir ini penulis menggunakan beberapa metode pengumpulan data, yaitu:

- a. **Interview**  
Researchers conduct question and answer directly to the relevant section that has the authority to provide data and information needed in writing the final project. In this interview the data obtained is an analysis of the current system.
- b. **Documentation**  
Researchers collect data, both in the form of archives and files relating to transactions in AP Studio Palembang as a reference for the development of marketing systems that will be made.
- c. **Questionnaire**  
Researchers collected customer satisfaction data that will be sampled by distributing questionnaires in the form of questions that double service such as price, quality of

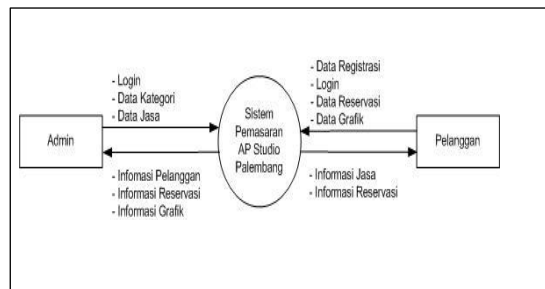
results and location of the studio. Studi Pustaka (jurnal)

Researchers collected data by going through several journals that are closely related to the problem objects to become references and references in writing this thesis.

## 4 RESULT AND DISCUSSION

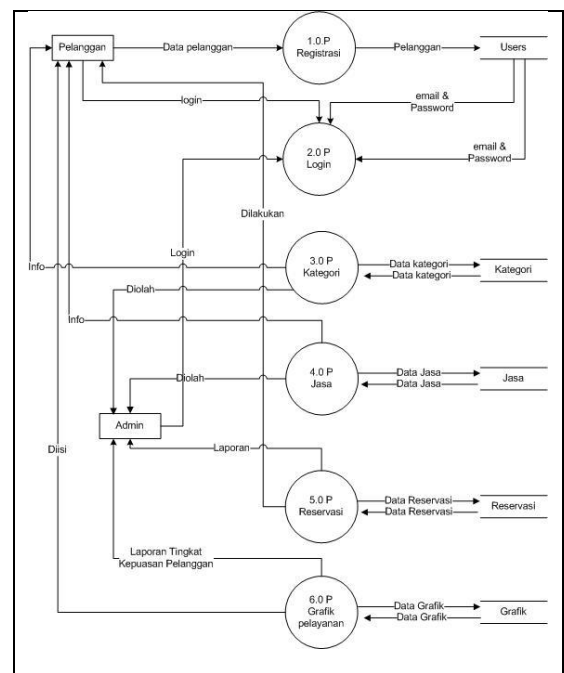
### 4.1 Design Diagram

#### 4.1.1 Context Diagram



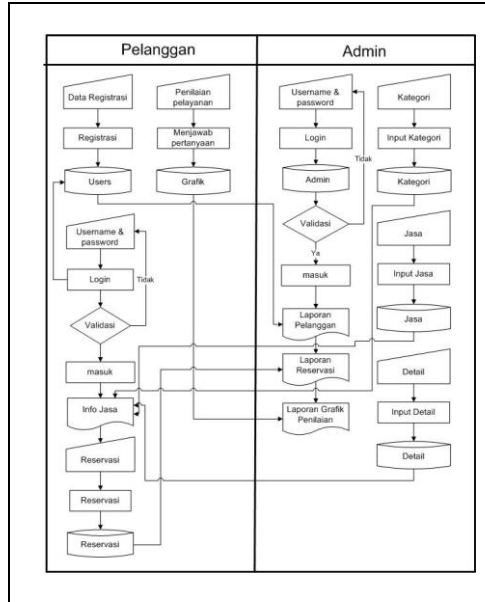
Picture 1 Context Diagram Marketing System of AP Studio

#### 4.1.2 Level 0 Diagram



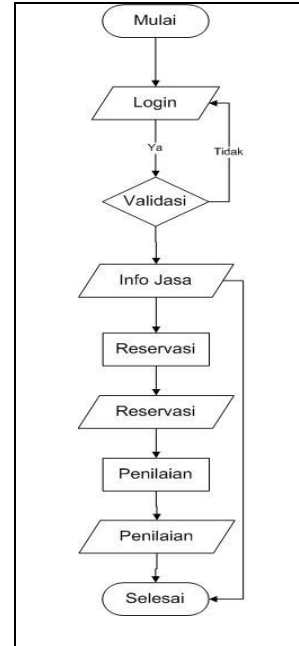
Picture 2 Level 0 Diagram Marketing System of AP Studio

### 4.1.3 Blockchart



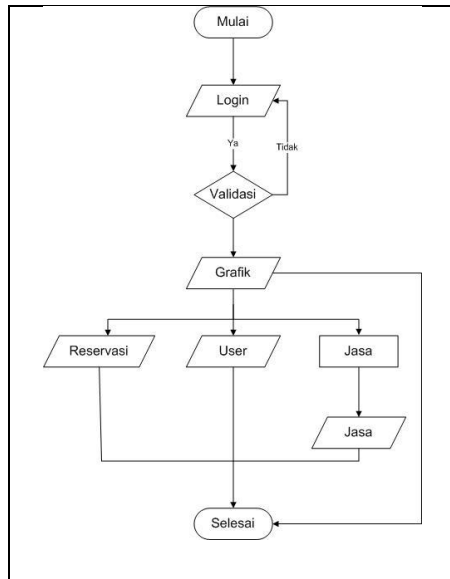
Picture 3 Blockchart of Marketing System

### 4.1.5 Flowchart Pelanggan



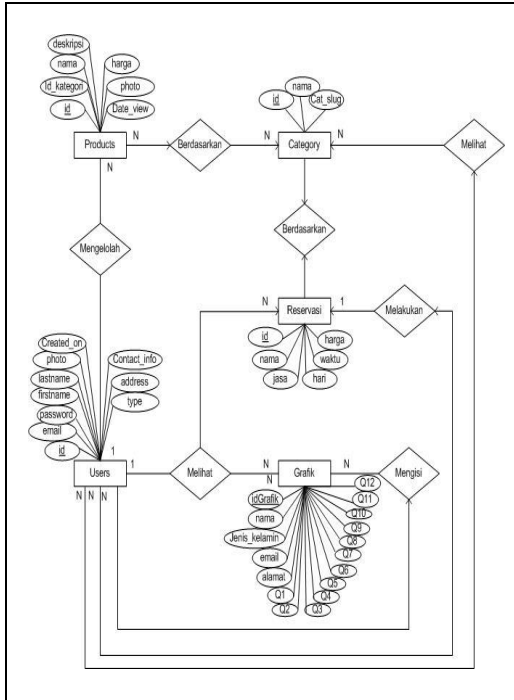
Picture 5 Flowchart of Customer

### 4.1.4 Flowchart Admin



Picture 4 Flowchart of Admin

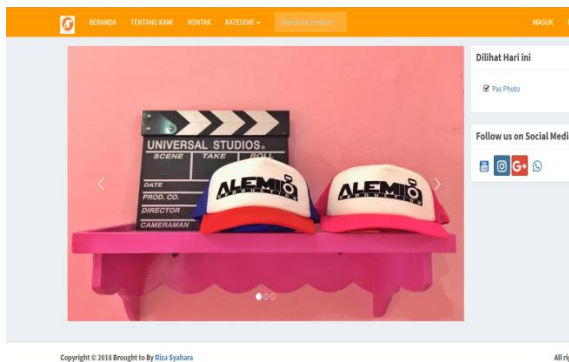
#### 4.1.6 Entity Relationship Diagram (ERD)



Picture 6 Entity Relationship Diagram (ERD)

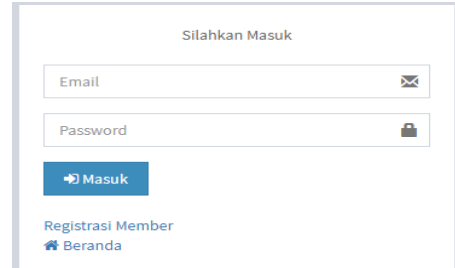
### 4.2 Program Page Views

#### 4.2.1 Display Home Page



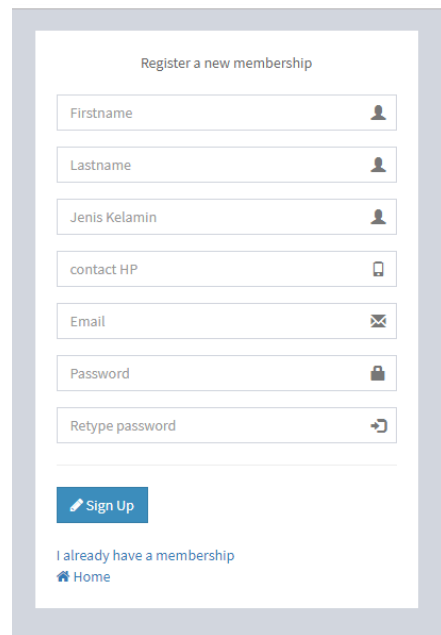
Picture 7 Display Home Page

#### 4.2.2 Login Page Display



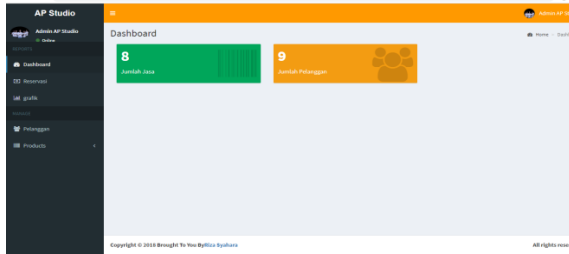
Picture 8 Display Login Page

#### 4.2.3 Registration Page Display



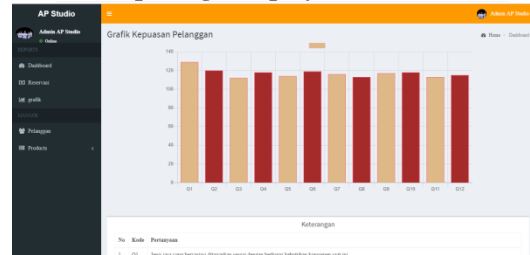
Picture 9 Display Registration Page

#### 4.2.4 Admin Page Display



Picture 10 Display Admin Page

#### 4.2.7 Graph Page Display



Picture 13 Graph Page Display

#### 4.2.5 Service Page Display

Name	Photo	Description	Price	Views Today	Tools
Couple Photo			Rp. 100000	8	[Status] [Tools]
Gold Pre-Wedding			Rp. 900000	9	[Status] [Tools]
Group Photo			Rp. 300000	9	[Status] [Tools]
Pre-Photo			Rp. 40000	9	[Status] [Tools]
Personal Photo			Rp. 200000	5	[Status] [Tools]
Platinum Pre-Wedding			Rp. 2000000	14	[Status] [Tools]
Silver Pre-Wedding			Rp. 400000	9	[Status] [Tools]
Silver Wedding			Rp. 3000000	9	[Status] [Tools]

Picture 11 Service Page Display

Tanggal	Nama Pelanggan	Jasa	Jam	Aksi
17/07/20	tusi	Studio Packages	8.00	[Delete]
16/07/20	Angga	Studio Packages	10.00	[Delete]
15/07/20	Angga	Studio Packages	90.00	[Delete]
15/07/20	Angga	Studio Packages	10.00	[Delete]

Picture 14 Page View Reservation

#### 4.2.6 Category Page Display

Category Name	Tools
Pre-Wedding Packages	[Status] [Tools]
Studio Packages	[Status] [Tools]
Wedding Packages	[Status] [Tools]

Picture 12 Category Page Display

#### 4.2.9 Page View Customer

**Most Viewed Today**

- Platinum Pre-Wedding
- Couple Photo
- Silver Wedding
- Personal Photo
- Gold Pre-Wedding

Tanggal	Jasa	Jam
17/07/20	Studio Packages	8.00

Picture 15 Page View Customer

#### 4.2.10 Page View Customer Reservation

Nama : tusi  
 Tanggal Booking : 13/07/2019  
 Nama Jasa : Studio Packages  
 Jam : [Dropdown]  
 [Reservasi]

Picture 16 Page View Customer Reservation

#### 4.2.11 Page View Customer Ratings

Penilaian Pelanggan  
Jawablah Secara Objektif!

Nama:

Jenis Kelamin:

Email:

Alamat:

1. Jenis jasa yang ditawarkan memuaskan sesuai dengan berbagai kebutuhan konsumen saat ini?  
☐ Sangat Setuju ☐ Setuju ☐ Tidak Setuju ☐ Sangat Tidak Setuju

2. Informasi mengenai setiap jasa yang tersedia diberikan secara rinci dan transparan (jumlah cetak di setiap album foto, maksimal waktu untuk pemotretan, maksimal jumlah personal untuk paket grup foto, dan hal-hal yang akan didapatkan untuk paket wedding dan jumlah lokasi untuk paket pre wedding)?  
☐ Sangat Setuju ☐ Setuju ☐ Tidak Setuju ☐ Sangat Tidak Setuju

3. Harga untuk pelayanan jasa foto atau video yang ditawarkan terjangkau bagi masyarakat umum?  
☐ Sangat Setuju ☐ Setuju ☐ Tidak Setuju ☐ Sangat Tidak Setuju

4. Latar yang digunakan untuk pemotretan foto yang disediakan oleh studio bervariasi dan elegan (background photo booth)?  
☐ Sangat Setuju ☐ Setuju ☐ Tidak Setuju ☐ Sangat Tidak Setuju

Picture 17 Page View Customer Ratings

## 5 CONCLUSIONS AND SUGGESTIONS

### 5.1 Conclusions

Based on the description in the previous chapter and in accordance with the problems that exist in writing this practical work report. Then it can be concluded several things as follows:

1. Website-based marketing system, created using the PHP programming language and MySQL database with the system development method Framework for the Application of System Thinking (FAST).
2. This system can facilitate customers in finding services that suit their needs with detailed information.
3. There is a reservation system for customers so as to reduce the possibility of queuing that occurs in the studio.
4. With a customer rating system, companies can find out the types of services that need to be improved.
5. In this system, there is a studio home page, login forms for admins and customers, registration forms for customers, admin dashboard, customer profile pages, service management pages for admins, reservation pages for customers, customer questionnaire pages, customer satisfaction chart pages for admin, reservation and customer report pages for admin and profile change menu for admin or customer.
6. The role of the admin in this system is managing data services, managing user data, monitoring customer satisfaction levels, and driving reservations.
7. While the role of customers in this system is to register, make reservations, process

customer data, and fill out service assessments in the system.

### 5.2 Saran

From the conclusions that have been put forward, it is produced some suggestions that will be used as useful input for AP Studio Palembang. As for suggestions - suggestions that can be used as a reference to help the development of marketing systems made for the next system developer, namely:

1. It is expected that this system can provide benefits for AP Studio Palembang to conduct marketing effectively, so that the desired market share can be fulfilled.
2. This system still has many shortcomings, for future system developers can develop or add several menus that have a role in marketing.
3. It is better if this system is implemented into devices that are used more often to make it easier to use, especially for customers like Android.

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