

DESIGN OF WEB-BASED INFORMATION SYSTEMS ON PT. STARVINDO ASIA UTAMA

Deny Novianti ¹, Anggi Oktaviani ^{2*}, Dahlia Sarkawi ³, Agus Priadi ⁴, Dwi Bagus Surbakti ⁵

Sistem Informasi; Administrasi Perkantoran; Bahasa Inggris

Universitas Bina Sarana Informatika

www.bsi.ac.id

denynov.dov@bsi.ac.id ¹, dahlia.dls@bsi.ac.id ³, agus.agp@bsi.ac.id ⁴

Informatika; Sistem Informasi

Universitas Nusa Mandiri

www.nusamandiri.ac.id

anggi.aov@nusamandiri.ac.id ^{2*}, dwibagus1998@gmail.com ⁵

(*) Corresponding Author

Abstrak

Sistem informasi adalah suatu sistem dalam suatu organisasi yang mengumpulkan kebutuhan pengelolaan data, mendukung operasi, memiliki arti penting manajemen dan strategis dalam kegiatan organisasi atau lembaga, dan memberikan laporan kepada pihak-pihak tertentu dengan menggunakan komputer sebagai sarana untuk mengakses internet.. Untuk dapat mengelola data dalam bentuk database, maka perlu dikembangkan sistem infomasi berbasis web. Untuk itu diperlukan sebuah sistem informasi yang dapat mempermudah jalannya suatu transaksi penjualan dan sebagai ajang promosi, sehingga diharapkan dapat meningkatkan penjualan pada perusahaan tersebut dan bersaing dengan perusahaan-perusahaan lainnya. Public relations dapat diartikan hubungan-hubungan antar publik, menunjukkan adanya banyak public yang harus melakukan hubungan tersebut, dan karena publiknya banyak, maka menandakan banyaknya hubungan. Pembuatan program web ini bertujuan agar dapat mempermudah transaksi penjualan jasa sehingga lebih hemat, cepat dan mudah tanpa perlu terhalang oleh jarak dan waktu.

Kata kunci: sistem informasi, berbasis web, public relations

Abstract

An information system is a system within an organization that collects data management needs, supports operations, has important management and strategy in organizational or institutional activities, and provides reports to certain parties by using computers as a means to access the internet. To be able to manage data in the form of a database, it is necessary to develop a web-based information system. For that we need an information system that can facilitate the sale of a sales transaction and as a promotional event, so that it is expected to improve the company and compete with other companies. Public relations can be interpreted as relations between publics, indicating that there are many publics who have to do these relationships, and because there are many publics, it means that there are many relationships. The purpose of making this web program is to facilitate service sales transactions so that they are more efficient, fast and easy without the need to be hindered by distance and time.

Keywords: information system; web-base; public relations

INTRODUCTION

An information system is a system within an organization that brings together data management needs, supports operations, is managerial and strategic activities (Asmara, 2016; Profesi et al., 2018) (Fadillah & Fitriana, 2019). The development of science and information technology is increasingly rapid nowadays, resulting in every company engaged in trade and services having to

compete with other companies in order to continue to exist, develop, and be able to win competitiveness (Kusniawan & Sardiarinto, 2016).

So far, the order for making website services has been carried out by companies with brochures or word of mouth or work relations. Problems also arise in ordering website services using brochures, it will take a long time to convey information about website creation services per package (Nurelasari & Kuspriyono, 2019)

The marketing system is still simple and still conventional (Taufani et al., 2016). Customers who want to do design consultations or other services must come to the office directly. The purpose of the research itself was carried out to build a website as a marketing medium for the company (Kusniawan & Sardiarinto, 2016). Promotional activities are very important in marketing a product (Tasruddin, 2015; Togoddy et al., 2018). Meanwhile, in promotion we need a media (Rifai et al., 2018) that can help promotion to target consumers. Therefore, in order to provide good service for consumers while promoting Edene Sayangku Cafe & Bakery products, an information medium in the form of a website was designed which aims to promote and sell products at the Edene Sayangku Cafe & Bakery store (Siregar, 2018). The purpose of writing this research is to assist Photo Studio managers to introduce and promote photo studios to the wider community, can be accessed by the wider community from anywhere and help manage data in the photo studio and help consumers to obtain information about the photo studio clearly (Sembiring & Ginting, 2018).

GAP Analysis is used as a business evaluation tool that focuses on performance gaps. This analysis is used to determine the gap between consumer perceptions and expectations and identify actions needed to be able to reduce this gap and achieve expected performance in the future (Nugraha & Yuniawan, 2017)

PT. Starvindo Asia Utama (SAU) is a national private company engaged in goods and services, offering document processing services. Problems arise at the time of ordering goods and services by using the brochure would require considerable time to submit information on their ordering goods or services which required by customers. Lalu problems also arise at the time the process pencatatan ordering goods and services that require a long time because it is still done manually. By using brochures, information cannot be conveyed fully to the customer. Reservations, sales and media promotions that only through relations or social media that is very time consuming and costly and unsatisfactory results. Based on the problem - the problem is then designed a web-based program to facilitate in marketing and also in managing the transaction process.

Making this web program is intended so that people can recognize, order, and expand marketing, as well as to simplify service sales transactions so that it is more economical, faster, and easier without the need to be hindered by distance and time.

RESEARCH METHODS

The data collection methods used are as follows:

1. Observation

Where the author uses this method by testing the results of the problem by looking for many references, for example by observing and analyzing the right website to be used as a reference.

2. Interview

Collecting data with direct questions and answers to company staff and company founders.

3. Literature review

The last data collection was carried out by the author by conducting literature studies related to theory and words with the creation of a website that was made.

Types of research

This research uses qualitative methods and a case study approach. The main techniques for collecting data are observation and in-depth interviews. Qualitative research in terms of other definitions states that it is research that uses open interviews to examine and understand the attitudes, views, feelings, and behavior of both individuals and groups of people (Saputra et al., 2019) (Arkandito et al., 2019).

Time and Place of Research

This research was conducted in January 2021 at PT. Starvindo Asia Utama, having its address at the Graha Sartika Building, Fl. 3 Room 302, Jl. Dewi Sartika No. 357 RT / RW 004/004 Kelurahan Cawang Kramat Jati Subdistrict, East Jakarta 13630.

Research Target / Subject

This research aims to make people know, order, and expand marketing, make it easier for website visitors to get a product or service that is offered starting from the installation of household appliances and also office document handling services or fast and foreign labor management services (TKA). easy without the need to be hindered by distance and time.

Procedure

The method used in making this website-based software also uses the waterfall method. Sukamto and Shalahuddin "waterfall model is often called a model of linear sequences or groove classic life. System development is carried out sequentially starting from analysis, design, coding, testing, and support stages" (Firmansyah & Udi, 2017).

Data, Instruments, and Data Collection Techniques

The method used in this research is Waterfall which is sourced from the books of Sukamto and Salahuddin. The explanation of this method is as follows (Firmansyah & Udi, 2017):

1. Analysis

In this stage the authors begin to analyze what the requirements of the system are, starting from the functional requirements of the system and the non-functional needs of the system (D. Nurnaningsih, A. A. Permana, 2020).

2. Design

The design stage is an advanced stage of the analysis stage wherein this stage presents the design design of applications such as interface design, and data base design that will be applied to the Mic Akade Information system that will be made.

3. Coding

At this stage the authors apply database design and interface design into a programming language, where the programming language used is to use the PHP language for websites.

4. Testing

The test stage is the final stage in the waterfall method wherein this testing stage the black box testing technique is used.

RESULTS AND DISCUSSION

The following is an explanation of this method which is divided into several stages, namely (Firmansyah & Udi, 2017):

A. Analysis

Analysis of Software Requirements which consists of :

1. Admin

Managing pageviews on the website (Back End). Check the email database from visitors who want offers from the company. Manage product / service information and add new product.

2. User

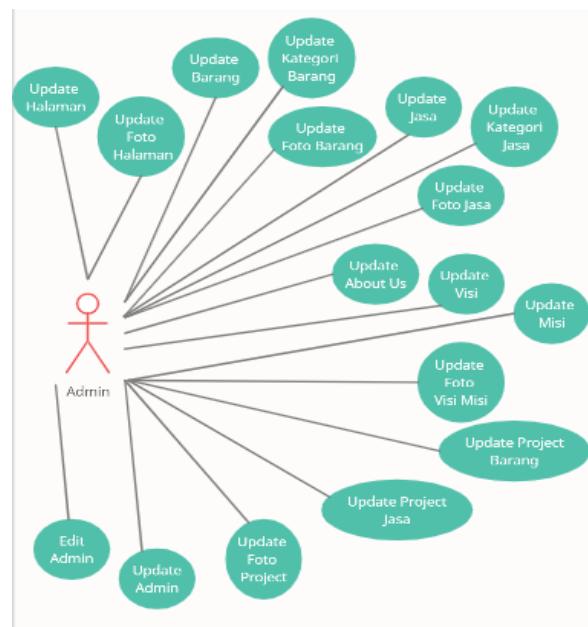
Subscribe to offers with the latest promos. Requesting offers of certain goods / services on the website

B. Design

After analyzing the needs, the authors make a design software in the system PT. Starvindo Asia Utama are as follows:

1. System Model Design

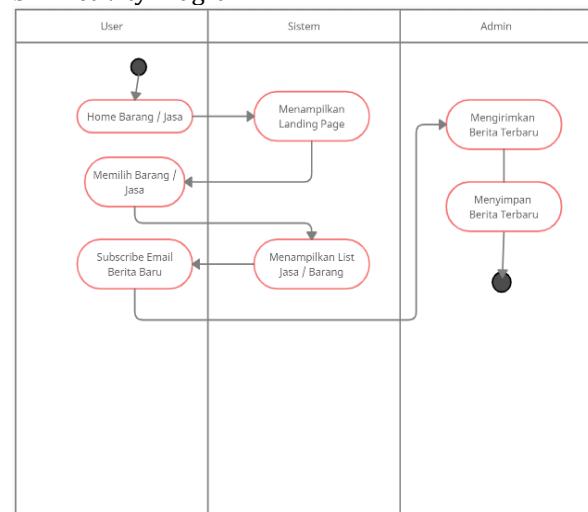
a. Use Case Diagram Admin



Picture 1. Use Case Diagram Admin

In Picture 1 at the top on to explain about the use case diagram is not terpisahkan part of the creation of a system or website, use case diagram illustrates how one or actor will use or exploit the system.

b. Activity Diagram

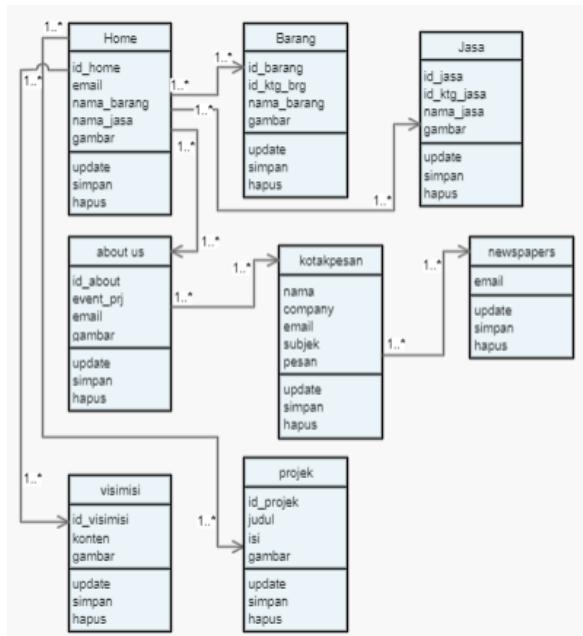


Picture 2. Email Subscription Activity Diagram

In Picture 2 is described Activity Diagram which is rancangan activity stream or flow of work in a system that will be run . Most functions activity diagram is showing aktifitas order process on the system . The following is an activity diagram of a Company Profile Website System Design at PT. Starvindo Asia Utama.

c. Class Diagram

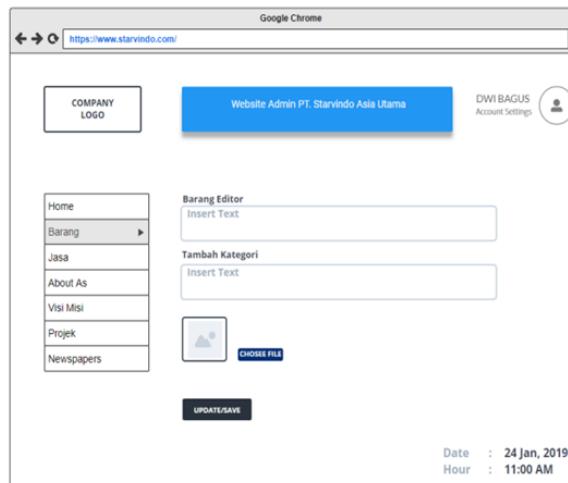
The following describes the Class Diagram of Information Systems on PT. Starvindo Main Asia



Picture 3. Class Diagram

In Picture 3 shows that the Class diagram describes and describes or describes the classes, attributes, and objects that exist on the created system.

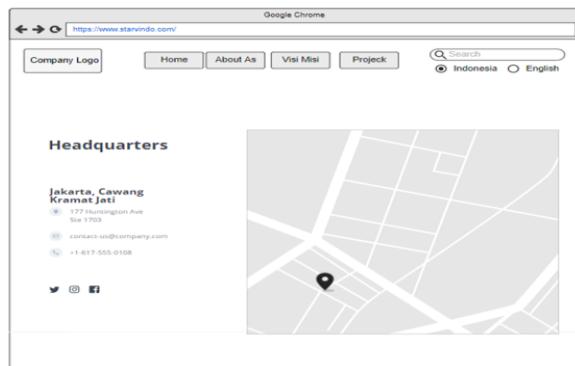
2. Interface Design
 a. Interface Home



Picture 4. Interface Home

In Picture 4 describes the appearance of the web site interface from the home page which aims to show that admins can update item and category data along with their photos.

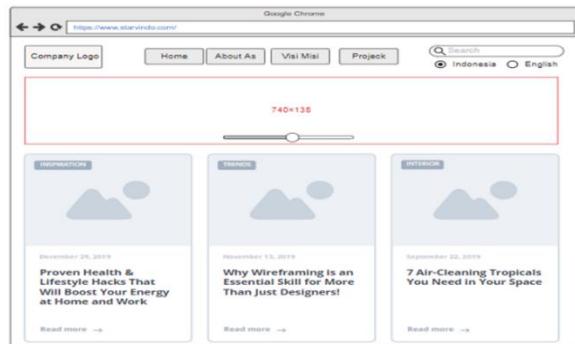
b. Interface About Us Page



Picture 5. Interface About Us Page

In Picture 5 describes the interface of the page of the website about us created. Where this view shows the company address in detail that aims to show the customer where the company address is complete and clear..

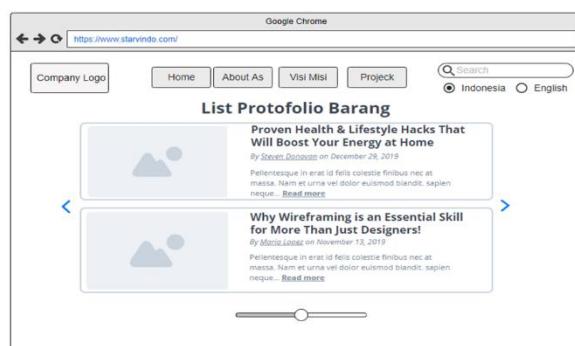
c. Project Section Header Interface



Picture 6. Project Section Header Interface

In the picture 6 displays the page interface of the Created Header Section Project website. Where it looks is to show the wide variety of projects offered by the company.

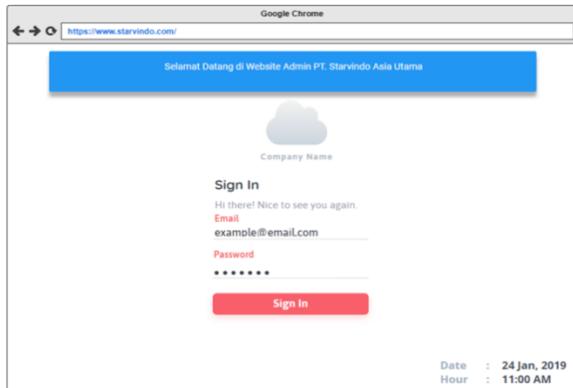
d. Client List Interface



Picture 7. Client List Interface

In the picture 7 described the list view of the Client's website created. Where this page aims to display a list of clients who work with the company.

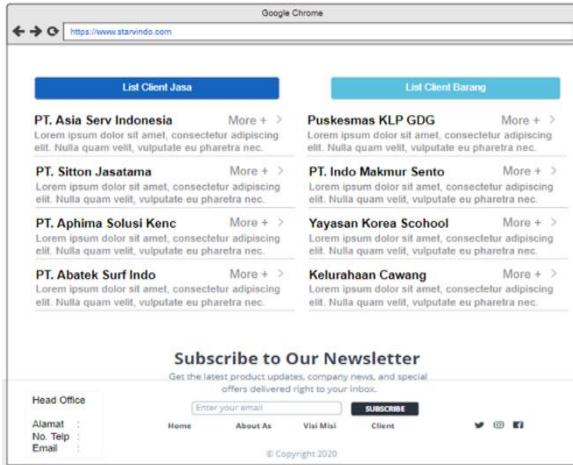
e. Admin Login Page Interface



Picture 8. Admin Login Page Interface

In the picture 8 described the interface of the login admin view page. Where this page aims to display the login page for enterprise admins.

f. Item Menu Page Interface

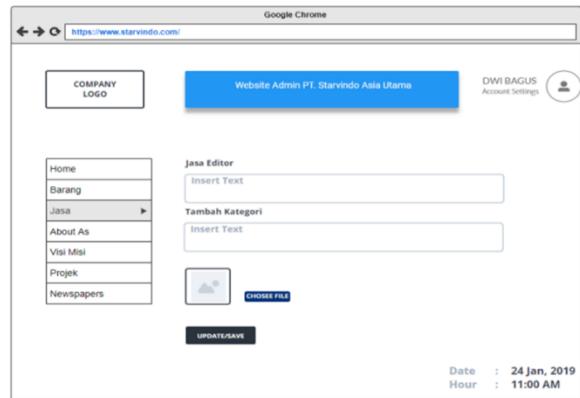


Picture 9. Item Menu Page Interface

In the picture 9 described the page interface of the Page Menu Item view. This page aims to display a list along with information from the company's clients.

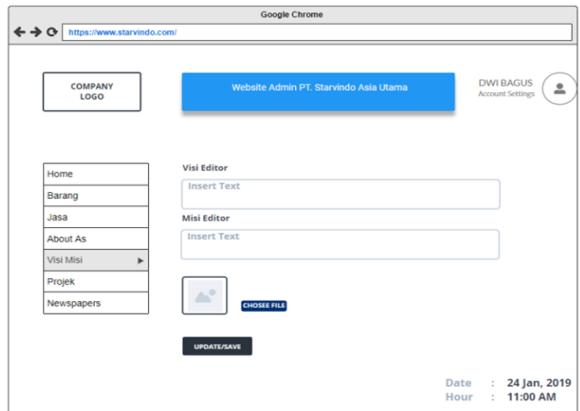
g. Services Menu Page Interface

In Figure 10 described the interface of the Services Menu view page. This page aims to update or add services and categories from those offered by the company.



Picture 10. Interface Halaman Menu Jasa

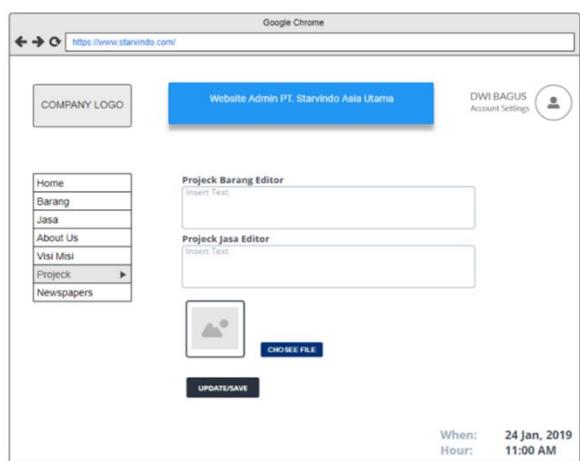
h. Vision and Mission Interface



Picture 11. Interface Visi Misi

In image 11 described the interface of the vision and mission pages. This page aims to edit the vision or mission as well as company photos.

i. Project Editor Interface



Picture 12. Project Editor Interface

In image 12 described the view from the project editor page. This page aims to update or add data

from projects of goods or services offered by the company.

3. Program Code Creation

At this stage the author makes programming code according to use case, activity diagram, and application sketches that have been previously made. The application used to create the code is Sublime Text Editor III, Photoshop, and Draw.io . Here is a bit of code program from the website is:

```
<?php
session_start();
include "library/controller.php";
$statement = new oop();
if($statement->check_session() == "true"){
    header("location:dashboard.php");
}
if(isset($_POST['login'])){
    $username = $_POST['username'];
    $password = $_POST['password'];
    $level = $_POST['level'];
    $statement-
>login_level($username,$password,$level);
}
?>
```

4. Testing

At this stage the authors conducted an experiment from the application that had been made, whether each tool was running well. And whether the application is made in accordance with the wishes of the user. If there are still mistakes, a thorough repair will be carried out. User Acceptance Test (UAT) is a process of testing by respondents which is intended to produce documents that serve as evidence that the system being developed is acceptable or not by the respondent , if the test results are considered to meet the needs of the respondent , the application can be applied (Pangistu et al. , 2019) . Testing using UAT focuses on the process of program input and output. Testing was done by asking a number of questions to 15 respondents . Results of the test of the respondents rated by 5 categories , namely A (Very Good), B (good), C (fair), D (No Good) and E (Very No Good). Here are the results of testing that can be in seen in table 1.

Table 1. UAT Testing

No	Question	Answer				
		A	B	C	D	E
1	Is the quality of the system information that is made already quite good ?	9	5	1	0	0
2	Does the display of the web has been quite interesting ?	8	5	2	0	0

No	Question	Answer				
		A	B	C	D	E
3	Do security system information that is made already quite good ?	9	4	2	0	0
4	Are menus created on the web has been fairly easy in understand ?	10	4	1	0	0
5	Do a web made already quite easy to use ?	9	3	3	0	0
6	Does the speed of the data transfer is already quite good ?	8	6	1	0	0
7	Does the speed of the process of system information that is made already quite good ?	7	6	2	0	0
Total		60	33	12	0	0

From the results of recapitulation of the whole answers of respondents who had been in seen in Table 1 , the majority of respondents believe positively that the number of answers is very good with a value of 60, while that argued pretty good there is 12 respondents . So it can be concluded that the application system information web that has been created can be received by users with good .

CONCLUSIONS AND SUGGESTIONS

Conclusion

The existence of a web -based service sales system design program at PT. Starvindo Asia Main can facilitate the interaction between sellers and buyers , and can speed up and simplify the transaction ordering goods or services . The website also created by displaying the profile of companies with complete as well as goods and services are sold with accurate , which is expected to boost the confidence of the buyer as well as to expand the space scope of the promotion for the web can be accessed from anywhere and anytime .

Suggestion

In the making of the website is necessary the holding of update data so that the information that is available on the web is the updated and in accordance with the situation in the company . Can also add new features that can be tailored to the needs of the company . Always make sure the security of the website that created that does not happen the things that are not at the desired start of human error or a hacker that can damage the system that has been created .

REFERENCES

Arkandito, G. F., Maryani, E., Rahmawan, D., & Wirakusumah, T. K. (2019). Komunikasi Verbal Pada Anggota Keluarga Yang Memiliki Anak Indigo. *Jurnal Manajemen Komunikasi*, 1(1), 42–56. <https://doi.org/10.24198/jmk.v1i1.9955>

Asmara, R. (2016). Sistem Informasi Pengolahan Data Penanggulangan Bencana Pada Kantor Badan Penanggulangan Bencana Daerah (BPBD) Kabupaten Padang Pariaman. *Jurnal J-Click*, 3(2), 80–91. <http://ejurnal.jayanusa.ac.id/index.php/J-Click/article/view/28/>

D. Nurnaningsih, A. A. Permana, S. R. and A. R. (2020). Designing Shiyam Application: An Android-based Fasting Reminder. *2020 7th International Conference on Electrical Engineering, Computer Sciences and Informatics (EECSI)*, 1–23. <https://doi.org/10.23919/EECSI50503.2020.9251891>

Fadillah, A. P., & Fitriana, D. (2019). Design of Project Data Management Information System. *IOP Conference Series: Materials Science and Engineering*, 662(2), 022014. <https://doi.org/10.1088/1757-899X/662/2/022014>

Firmansyah, Y., & Udi, U. (2017). Penerapan Metode SDLC Waterfall Dalam Pembuatan Sistem Informasi Akademik Berbasis Web Studi Kasus Pondok Pesantren Al-Habib Sholeh Kabupaten Kubu Raya, Kalimantan Barat. *Jurnal Teknologi Dan Manajemen Informatika*, 4(1). <https://doi.org/10.26905/jtmi.v4i1.1605>

Kusniawan, A., & Sardiarinto, S. (2016). Perancangan Website Jasa Desain Interior Sebagai Media Pemasaran Studi Kasus: CV. Focalpoint Interior. *EVOLUSI: Jurnal Sains Dan Manajemen*, 4(2), 1–10. <https://doi.org/10.31294/EVOLUSI.V4I2.694>

Nugraha, N. C., & Yuniawan, A. (2017). IMPLEMENTASI IMPORTANCE AND PERFORMANCE ANALYSIS (IPA) DALAM PELAKSANAAN PENILAIAN KINERJA KARYAWAN (PNS) (Studi pada Kementerian Pekerjaan Umum Dan Perumahan Rakyat, SNVT PJPA Pemali-Juana PPK PAT dan PPK PAB) | Nugraha | Diponegoro Journal of Management. *Diponegoro Journal of Management*, 6(4), 679–692. <https://ejournal3.undip.ac.id/index.php/djoms/article/view/18020/>

Nurelasari, E., & Kuspriyono, T. (2019). Perancangan Sistem Informasi Pembuatan Jasa Website. *Syntax: Jurnal Informatika*, 8(1), 24–35.

Profesi, D. E., Kusrini, K., & Arief, M. R. (2018). Analisis Layanan Strategic Yang Mempengaruhi Sikap Pengguna Sistem Informasi Univeritas Dehasen Bengkulu. *Informasi Interaktif*, 3(3), 187–192. http://www.e-journal.janabdra.ac.id/index.php/informasi_interaktif/article/view/810

Rifai, D., Astriyani, E., & Indria, U. (2018). Pembuatan Video Company Profile Sebagai Penunjang Informasi dan Promosi Pada PT. Daiichi Elevator Indonesia. *Technomedia Journal*, 3(1), 98–109. <https://doi.org/10.33050/tmj.v3i1.384>

Saputra, M. F. B., Kristiyanto, A., & Doewes, M. (2019). Management Analysis of Indonesian Petanque Federation Province (FOPI) Central Java in Supporting Sports Achievement in Indonesia. *International Journal of Multicultural and Multireligious Understanding*, 6(2), 837. <https://doi.org/10.18415/ijmmu.v6i2.895>

Sembiring, J. O., & Ginting, W. (2018). Sistem Informasi Penjualan Barang dan Jasa pada Studio Photo Topaz Hexagon Medan Berbasis Web. *MEANS (Media Informasi Analisa Dan Sistem)*, 2(2), 153–160. http://ejurnal.ust.ac.id/index.php/Jurnal_MEANS/

Siregar, V. M. M. (2018). PERANCANGAN WEBSITE SEBAGAI MEDIA PROMOSI DAN PENJUALAN PRODUK | Mulia Siregar | Jurnal TAM (Technology Acceptance Model). *Jurnal TAM (Technology Acceptance Model*, 9(1), 15–21. <http://ojs.stmikpringsewu.ac.id/index.php/JurnalTam/article/view/594/>

Tasruddin, R. (2015). Strategi Promosi Periklanan Yang Efektif. *Jurnal Al-Khitabah*, 2(1), 107–116. <http://journal.uinalauuddin.ac.id/index.php/Al-Khitabah/article/view/2623/>

Taufani, M. K., Riyadi, R., & Dewantara, R. Y. (2016). Analisis Dan Desain Sistem Informasi Pemasaran (Studi Pada Sistem Informasi Pemasaran Untuk Promosi CV. Intan Catering). *Jurnal Administrasi Bisnis*, 38(2), 1–10. <http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/1502>

Togodly, E., Tarore, H. S., & Tumbel, T. M. (2018). Pengaruh Promosi terhadap Peningkatan Penjualan pada Koperasi Serba USAha Baliem



Arabica di Kabupaten Jayawijaya. *Jurnal Admiistrasi Bisnis (JAB)*, 6(1), 1-9.
<https://ejournal.unsrat.ac.id/index.php/jab/article/view/19036>