

# Training Information System at PT. Teknik Media Utama Banda Aceh City

**Chandra Bayu Aji \***

Information Technology Faculty, AMIK Indonesia

Email: [chandrabayuji@gmail.com](mailto:chandrabayuji@gmail.com)

Received: 27 April 2021; Accepted: 25 July 2021; Published: 30 December 2021

**Abstract:** The aim of this research is; 1) To find out the training information system at PT. Banda Aceh Main Media Engineering, and 2) To design a training information system at PT. Teknik Media Utama Banda Aceh City. FlowMap and data flow diagrams are used to show the general structure of an information. While the application development process using the waterfall model proposes a systematic and sequential approach to software development that starts at the level and progress of the system throughout analysis, design, code, testing, and maintenance. The research results include; 1) Management of training participant database at PT. Teknik Media Utama is ready to replace the old system gradually in a certain parallel period (4-6 months). During that time, the old system is still used to maintain data security and integrity if an error occurs in the new system, 2) The system will be very helpful for users or data managers of trainees at PT. Teknik Media Utama more quickly, easily and accurately in every activity related to training participant data, and 3) The system is very user friendly and in accordance with the needs of the object. Because in designing designs and others, the author does not design based on personal but always consults with users.

**Index Terms:** System; Information; Training; Waterfall.

## 1. Introduction

Human resources are the heart of an organization, from human resources are other organizational elements such as capital, technology, and money are controlled [1,2]. Talking about human resources cannot be separated from other management activities or processes such as strategic planning, management development and organizational development [3]. The relationship between these aspects of management is so close that it is difficult for us to avoid talking separately from one another [4,5].

To support this, HR training and development is a necessity for organizations, because placing employees directly on the job does not guarantee that they will succeed [6]. New employees often feel uncertain about their roles and responsibilities [7]. Job demands and employee capacity must be balanced through orientation and training programs [8,9]. Both are very much needed. Once employees have been trained and have mastered the job, they need further development to prepare for their future responsibilities [10]. There is a trend that continues to occur, namely the increasing diversity of employees with a flatter organization, and increasing global competition, training and development efforts can cause employees to be able to develop greater duties and responsibilities. The objectives of this research are; 1) To find out the training information system at PT. Banda Aceh Main Media Engineering, and 2) To design a training information system at PT. Teknik Media Utama Banda Aceh City.

## 2. Research Method

The analysis is carried out to obtain information about what is currently running in the administration field where the information collected is mainly about the advantages and disadvantages that apply so that later it can produce new information that is effective and efficient [11]. At this stage, it also describes several procedures or stages in carrying out data collection on training participants equipped with a flowmap about what is currently running and proposals to PT. Teknik Media Utama. Flowmap is a flow chart that shows the general structure of an information, which displays a general description of the data processing sequence in a general form and shows the overall work flow. Based on the results of direct observations at PT. Teknik Media Utama. The system that is running at PT. Up to now, the Main Media Techniques have used a computerized system, especially in inputting training participant data, but only using Microsoft Office Excel applications. PT. Teknik Media Utama currently has a computer as a tool, but the computer is only used for typing letters and not for inputting data for new training participants due to the absence of applications that support the computer. The analysis of the current procedure describes systematically the activities that occur in the information system of training

participants at PT. Teknik Media Utama, data processing procedures for ongoing training participants; 1) Training participants send training participant files to the training and HR department, 2) Data is recorded in the excel application, 3) Each data is separated from training participant data per work unit, 4) The Head of Training verifies the training participants every month, and 5) Training participant information reports are submitted and reviewed by the Head of Training at the end of each year. While the application development process using the waterfall model proposes a systematic and sequential approach to software development that starts at the level and progress of the system in all analysis, design, code, testing, and maintenance [12,13].

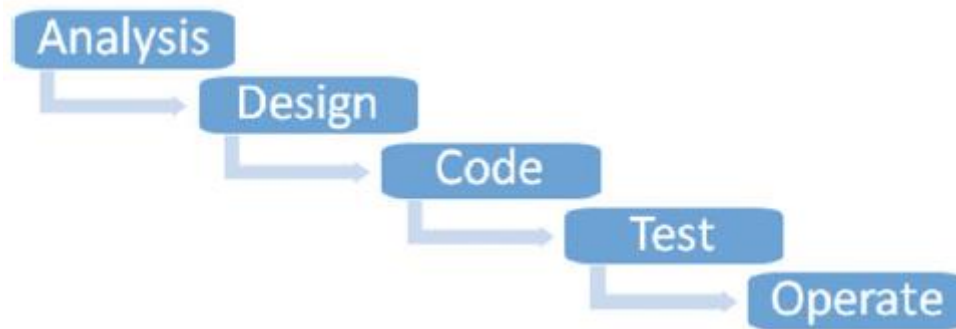


Fig 1. Waterfall Stage

In the design process using Data Flow Diagrams (DAD). The data collection process for training participants at PT. Teknik Media Utama has basically used computers. Data collection on training participants, then the section sends the form of training participants, especially new training participants to fill in other complete data. Furthermore, after all the data is complete, the administration section makes a recapitulation report regarding the data of the training participants.

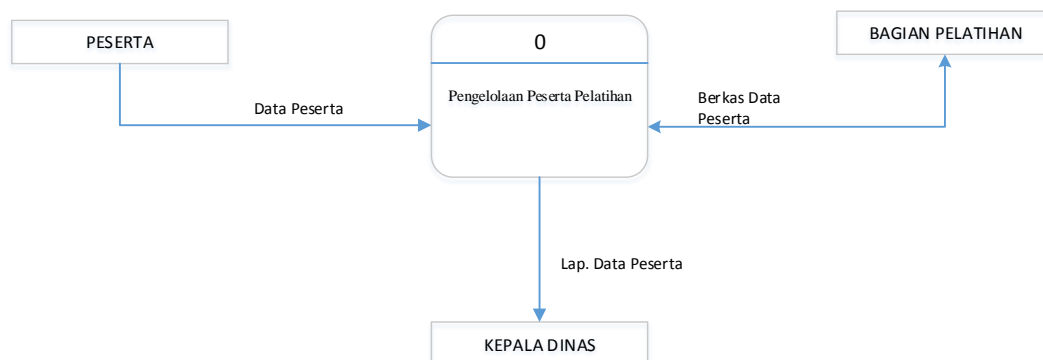


Fig 2. Context Diagram

In Figure 2 the context diagram, the section staff or officers are entering training participant data. The system or the Head of Training makes an approval which will later be processed into the making of the training participant program. Furthermore, the prospective trainees will be recorded in a ledger as evidence and evaluation of the trainees. Meanwhile, the process of collecting data on training participants can be seen in the following figure:

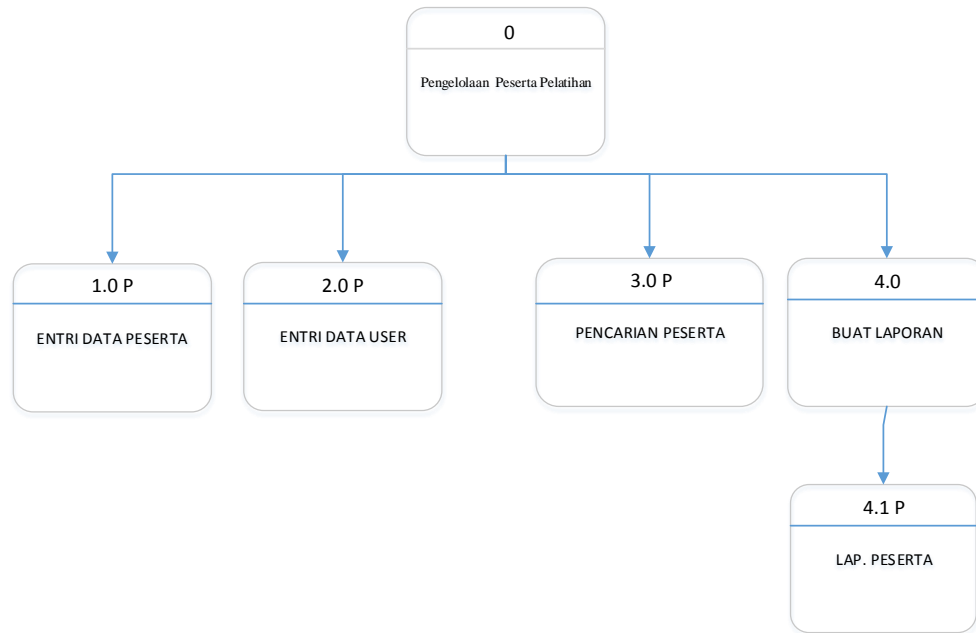


Fig 3. Tiered Diagram

Based on Figure 3, it can be seen that in each data collection of training participants at PT. Teknik Media Utama. The four processes are Data Entry of training participants, User Data Entry, Search and Create Reports. For more details, from one process to another can be seen in Figure 4.

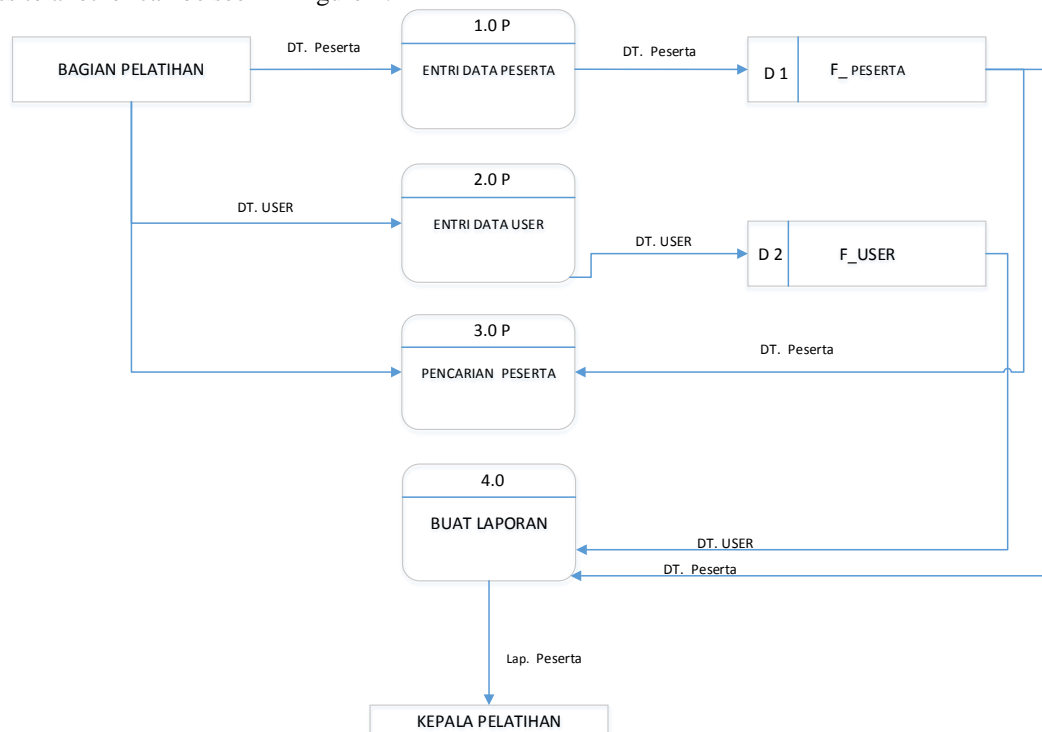


Fig 4. Data flow diagram of level 0 system running

Based on Figure 4, it can be explained that the data collection process for the training participants, the officers recorded the data of the training participants. The process of recording training participants will be reported periodically to the Head of Training.

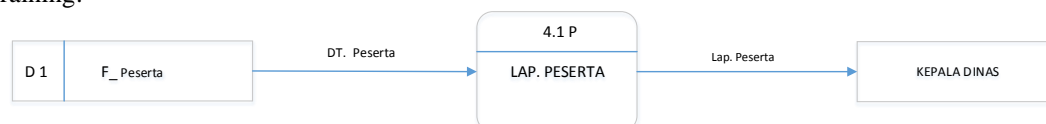


Fig 5. Data flow diagram level 1 process number 4 system design

Based on Figure 5, it can be explained that each data file provides data to the report generation process, from each report generation process it provides each report to the Head of Training, the training participant data creation process.

### 3. Result and Discussion

The results of the research are a prototype of a Training Information System application, which consists of; login form, main menu, participants, users, searches, and reports as shown in Figure 6 below:

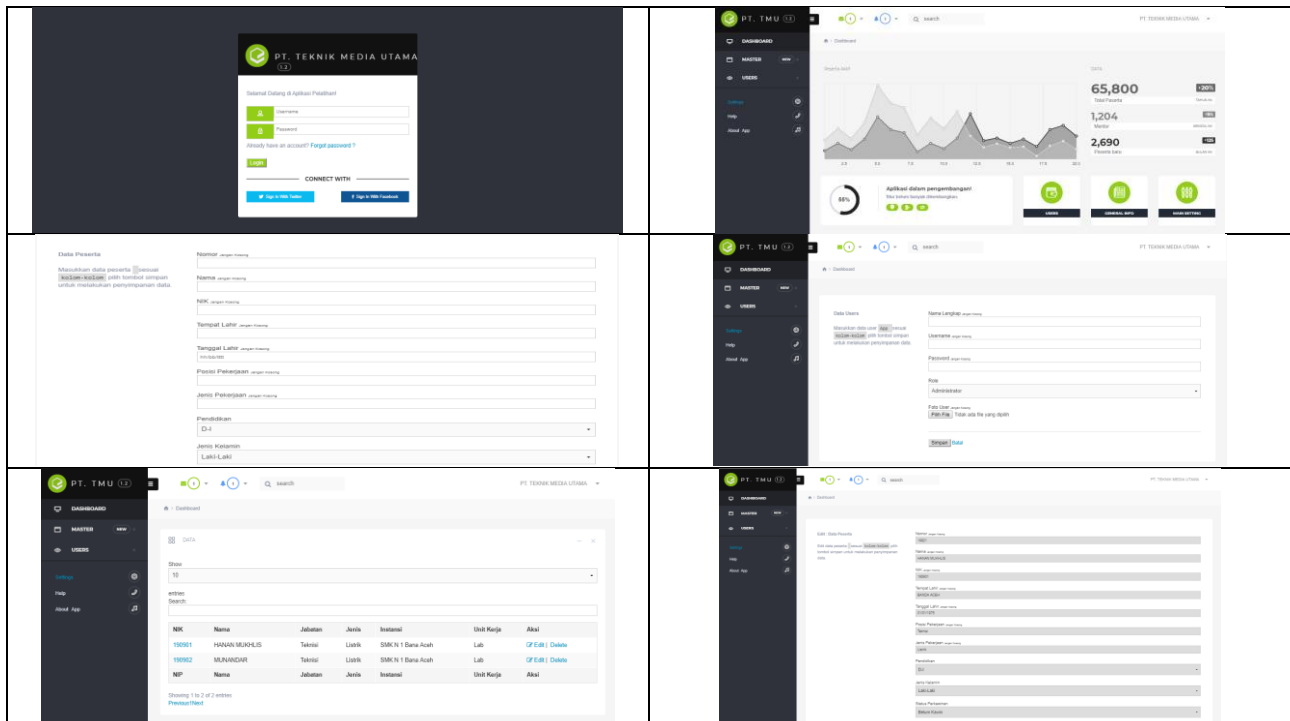


Fig 6. Results of Training Information System Design

The following are the hardware and software needed to use the trainee system program, namely:

#### a. Hardware

Hardware that can support this application requires hardware with the following specifications:

- 1) CPU at least Pentium 3 with a speed of 633 Mhz
- 2) RAM 256 MB
- 3) Hard disk minimum 1 GigaByte
- 4) Monitor
- 5) Keyboard and Mouse
- 6) Printers

#### b. Software

Software that supports this application include:

- 1) Windows 7,8,10, Linux, Symbian, Android
- 2) Browsers (Mozilla, Google Chrome)
- 3) Xampp

### 4. Conclusion

Referring to the results of the author's research, designing a system that is in accordance with user needs and various system tests and program tests in its design, in the end the author draws several conclusions regarding the training information system at PT. Teknik Media Utama that have been carried out include; 1) Management of training participant database at PT. Teknik Media Utama is ready to replace the old system gradually in a certain parallel period (4-6 months). During that time, the old system is still used to maintain data security and integrity if an error occurs in the new system, 2) The system will be very helpful for users or data managers of trainees at PT. Teknik Media Utama more quickly, easily and accurately in every activity related to training participant data, and 3) The system is very user friendly and in

accordance with the needs of the object. Because in designing designs and others, the author does not design based on personal but always consults with users.

## References

- [1] Sarboini, S. and Yanti, S., 2018. Faktor-Faktor yang Mempengaruhi Produktivitas Kerja Pegawai Dinas Kebudayaan dan Pariwisata Aceh. *Jurnal EMT KITA*, 2(1), pp.38-46.
- [2] Munawir, M. and Ardiansyah, A., 2017. Decision Support System Pemilihan Karyawan Berprestasi Dengan Pendekatan Analisa Gap Profile matching Di Kantor Perwakilan Bank Indonesia Provinsi Aceh. *Jurnal JTik (Jurnal Teknologi Informasi dan Komunikasi)*, 1(1), pp.7-14.
- [3] Sufyan, S., 2018. Karakter Pemimpin dan Hubungannya dengan Kinerja Karyawan PDAM Tirta Daroy Cabang Sultan Iskandar Muda Kota Banda Aceh. *Jurnal EMT KITA*, 2(2), pp.74-81.
- [4] Rizal, S., 2017. Pengaruh Kecerdasan Emosional, Perilaku Kognitif, Kemampuan Personal dan Kompetensi Kepemimpinan Terhadap Kinerja Koperasi di Provinsi Aceh. *Jurnal EMT KITA*, 1(1), pp.36-49.
- [5] Wali, M., Iqbal, T. and Syafwandhinata, J., 2021. IbM Pelatihan, Pembinaan dan Pendampingan Penggunaan Aplikasi Management Stock Control. *AJAD: Jurnal Pengabdian kepada Masyarakat*, 1(1), pp.9-16.
- [6] Rizal, S., 2018. Pengaruh Gaya Kepemimpinan Konsultatif dan Tuntutan Tugas Terhadap Komitmen Organisasi pada PT. Bank Mandiri (Persero) Cabang Banda Aceh. *Jurnal EMT KITA*, 2(2), pp.99-109.
- [7] Fahmi, I., 2017. Pengaruh Sumber-Sumber Stres Kerja Terhadap Produktivitas Kerja Karyawan PT. Bank Aceh Syariah Cabang Banda Aceh. *Jurnal EMT KITA*, 1(1), pp.59-67.
- [8] Ismail, I. and Syafwandhinata, J., 2020. IbM PELATIHAN, PEMBINAAN DAN PENDAMPINGAN BIDANG KERAJINAN, SOUVENIR, SABLON DAN PERCETAKAN. *Bakti Banua: Jurnal Pengabdian Kepada Masyarakat*, 1(1), pp.1-9.
- [9] Nasir, N. and Yuslinaini, Y., 2017. Analisis Pemetaan Industri Kreatif Subsektor Kerajinan Serta Dampak Peningkatan Kesejahteraan Masyarakat di Kabupaten Aceh Besar. *Jurnal EMT KITA*, 1(1), pp.12-17.
- [10] Ismail, I., Al-Bahri, F.P.F.P., Ahmad, L. and Salam, A., 2020. IbM Pelatihan Kewirausahaan Sebagai Upaya Menumbuhkan Jiwa Kewirausahaan dan Menggali Ide Usaha Baru. *Jurnal Pengabdian Nasional (JPN) Indonesia*, 1(1), pp.16-22.
- [11] Cahya, N., 2020. Perancangan Sistem Informasi Absensi Karyawan Pada Kantor Satpol Pp Dan Wh Aceh. *Jurnal Indonesia: Manajemen Informatika dan Komunikasi*, 1(2), pp.63-69.
- [12] Shaikh, S. and Abro, S., 2019. Comparison of traditional & agile software development methodology: A short survey. *International Journal of Software Engineering and Computer Systems*, 5(2), pp.1-14.
- [13] Anggrainy, H., 2021. PERANCANGAN SISTEM INFORMASI PELANGGAN PASIEN PADA RUMAH SAKIT JIWA (RSJ) ACEH. *Jurnal Indonesia: Manajemen Informatika dan Komunikasi*, 2(1), pp.41-52.