■ 1

Effects of iLearning Media on Student Learning Motivation

Qurotul Aini¹, Iswachyu Dhaniarti², Alfiah Khoirunisa³
¹,³ STMIK Raharja, Jl. Jendral Sudirman No.40 Modernland, Cikokol, Tangerang
² Universitas Narotama, Jl. Arief Rachman Hakim 51, Surabaya 60117, Indonesia
e-mail: aini@raharja.info, rector@narotama.ac.id, alfiah@raharja.info

`

Abstract

As we know today, Indonesia has entered the era of revolution 4.0 which in that era had a major influence on the changes that took place in all fields. Including in the field of education, in particular, the changes that occur in the world of education today are so rapid with the abandonment of learning methods that still use conventional methods. Doing tasks with books, face-to-face communication, collecting assignments in hard copy, which will certainly cause a lot of losses in a certain period of time, such as many assignments that are long buried and difficult to find when needed. This method is certainly considered a boring and time-consuming method, where students cannot explore in the learning process which will take a long time to do a manual search for the number of files that have been collected. At present, the application of learning methods with concepts organizes many reports on the work of assignments on a website content management system. This learning method is made to maximize the way to organize student assignment reports for time management efficiency, therefore this learning method can be applied as the management of education in higher education. It is expected that the existence of this method can improve time management in learning so that it motivates to explore abilities in the existing learning process.

Keywords: Management, Content Management System, Assignment

1. Introducing

The current information technology certainly experiences developments that are in accordance with the needs of the organization's activities in facing the world of competition that is so tight. At present, information can not only be absorbed by relying on devices that are still manual or considered conventional, therefore the role of computers is considered important in providing a solution and is a good tool in improving the system that is not optimal. In addition, with the existence of computerization that can support the improvement of service quality of an organization so that it can improve the development of the organization that is running [1-2].

College of Higher Education Raharja is one of the institutions or institutions of higher education that is engaged in the field of IT (Information Technology) which never stops to always innovate, namely creating an information system media that is used for daily needs. In an information media system and its delivery, it still uses a website, which is conveyed both personally and teamwork. But given the increasing need for students accompanied by the quality of information media that is getting better, therefore the information needed is also increasing, especially regarding the media delivered as well as

the media used to convey information, so that the quality and quantity of the current system is far better [3].

In building a website, it requires a simple and attractive display so that it can create a user-friendly appearance for visitors so that user participation is expected to support the success of information systems that can produce satisfaction levels for users of information systems or application providers. Instructional systems are designed with the main objective, namely to increase the effectiveness of learning [4].

Untung Rahardja et.al. (2011) describes that the system iLearning (integrated Learning) or in English called the integrated learning system that is applied is one form to improve the quality of education towards a modern and quality.

By doing the optimization of management assignments on a Content Management System-based website it is felt that it is able to collect the number of assignments made by students to utilize the time effectiveness in the teaching and learning process. Not only that media Content Management System provides information in the form of things about lecture files that are always needed, for examples such as lecture material, a collection of student names, the collection of student assignments, and the results of sharing knowledge carried out by students. So, learning that was previously undertaken in a conventional way feels lighter, efficient and enjoyable.

2.   Research Method

In a study, of course, using research methods to achieve the goal also get the accurate and reliable information needed by a researcher to carry out several stages in research. In the research application of Content Management System website has 8 (eight) stages that are in accordance with the stages of software system development, including the identification of needs, planning, designing prototypes, reviewing prototypes, implementation, deployment, and maintenance. But in this study only 4 (four) stages of the process will be used, namely identifying needs, planning, designing prototypes and reviewing prototypes. The following design research methods used:
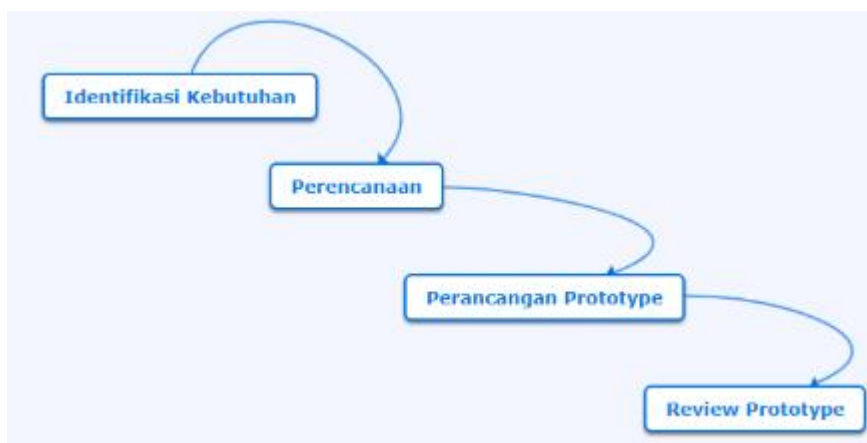
Figure 1. Research Stage

Identify needs, by taking a top and down approach to get a design or description of the teaching materials that will be presented on the website later. Furthermore, planning is the stage of analyzing the data that has been obtained from the results of identification needs. Then, Prototype Design is done to adjust between the needs of users and the system that was planned before being implemented in real terms. The last is a Prototype Review, carried out to improve the system if there is a discrepancy with user needs. The following is a list of literature used in this study:

1. The research was conducted by Eva Hariyanti, Indah Werdiningsih and Kridanto Surendro with the research title "MODEL PENGEMBANGAN DASHBOARD UNTUK MONITORING DAN EVALUASI KINERJA PERGURUAN TINGGI". In this study discuss the design of the model used for the development of dashboards for the needs of monitoring and evaluating university performance [5].

2. Research conducted by Henderi, Maimunah, and Randy Andrian from Perguruan Tinggi Raharja in 2011 entitled "Desain Aplikasi E-learning Sebagai Media Pembelajaran Artificial Informatics" In designing this artificial informatics e-learning learning media through a stage consisting of making a global design consisting of: Unified Modeling Language (UML) use case diagrams and class diagrams. The e-learning media website artificial informatics that has been built can provide another alternative in studying artificial informatics because it has facilities to update data so that the data displayed always follows the development of artificial informatics [6].

3. Salem Alkhalaf, Steve Drew, Rayed Alghamdi, Osama Alfarraj (2012) in their research entitled "E-learning system on higher education institutions in KSA: attitudes and perceptions of faculty members" E-Learning Systems are a technological development that has reformed and restructured the delivery and interaction of students and teachers with course materials and related resources. E-Learning systems have been widely used in developed countries and have recently become more popular in many developing countries [7]

4. The research conducted by Eva Hariyanti, Endah Purwanti with the title namely "Perancangan Sistem Dashboard Untuk Monitoring Indikator Kinerja Universitas". This study discusses the dashboard system built to

monitor and evaluate the university's key indicator performance (KPI). The dashboard consolidates and presents KPI at a glance in the form of a visual display on one screen [8].

5. Untung Rahardja, Sudaryono, Irwan Nurdin (2014) in their research entitled "Implementasi iMe (iLearning Media) Dalam Mendukung Sistem Pembelajaran iLearning Pada Perguruan Tinggi" iLearning Media or shortened by the name iMe is a web application that is created and can be used by all students of colleges Raharja to explore their creativity in learning. This is an online learning system that facilitates student learning, because it can be done anywhere and anytime. It was concluded that the contribution of the iMe can be used as a medium of information for learning systems for the entire community Raharja colleges [1].

6. The research was conducted by Ary Budi Warsito, Indri Handayani and Yusnita Dewi with the titles namely "Sistem Berita Online Berbasis Web Pada Perguruan Tinggi Raharja" in this study discussing news sites that present provide convenience for the community because the development of the website as a means of information is able to present all forms of online news information that is more up-to-date, quickly presented and certainly easily accessible anywhere. The purpose of designing an online news system is to provide alternative solutions that are more effective to Raharja's people, especially in terms of information dissemination using existing information technology [9].

7. Research conducted by Untung Rahardja, By Sholeh, and Fitria Nursetianingsih with the title "PENGGUNAAN DASHBOARD UNTUK MENGONTROL KINERJA ABSENSI PEGAWAI GUNA MENINGKATKAN PROFESIONALISME PEGAWAI PADA PT. SINARMAS LAND PROPERTY". In this study explained the use of dashboards that provide information on employee absenteeism discipline can be used to make company decisions to consider in maintaining employees to work together to achieve the success of the company's business. The data displayed in the dashboard is in the form of an interactive graph so that from the graph the company can find out the performance of attendance from its employees [10].

8. The research was conducted by Eva Hariyanti, Indah Werdiningsih and Kridanto Surendro with the research title "MODEL PENGEMBANGAN DASHBOARD UNTUK MONITORING DAN EVALUASI KINERJA PERGURUAN TINGGI". In this study discuss the design of the model used for the development of dashboards for the needs of monitoring and evaluating university performance [5].

9. Research conducted by Henderi, Maimunah, and Randy Andrian from Perguruan Tinggi Raharja in 2011 entitled "Desain Aplikasi E-learning Sebagai Media Pembelajaran Artificial Informatics" In designing this artificial informatics e-learning learning media through a stage consisting of making a global design consisting of: Unified Modeling Language (UML) use case diagrams and class diagrams. The e-learning media website artificial informatics that has been built can provide another alternative in studying artificial informatics because it has facilities to update data so that the data displayed always follows the development of artificial informatics [6].

10. Salem Alkhalaf, Steve Drew, Rayed Alghamdi, Osama Alfarraj (2012) in their research entitled "E-learning system on higher education institutions in KSA: attitudes and perceptions of faculty members" E-Learning Systems are a technological development that has reformed and restructured the delivery and interaction of students and teachers with course materials and related resources. E-Learning systems have been widely used in developed countries and have recently become more popular in many developing countries [7]

11. The research conducted by Eva Hariyanti, Endah Purwanti with the title namely "Perancangan Sistem Dashboard Untuk Monitoring Indikator Kinerja Universitas". This study discusses the dashboard system built to monitor and evaluate the university's key indicator performance (KPI). The dashboard consolidates and presents KPI at a glance in the form of a visual display on one screen [8].

12. Untung Rahardja, Sudaryono, Irwan Nurdin (2014) in their research entitled "Implementasi iMe (iLearning Media) Dalam Mendukung Sistem Pembelajaran iLearning Pada Perguruan Tinggi" iLearning Media or shortened by the name iMe is a web application that is created and can be used by all students of colleges Raharja to explore their creativity in learning. This is an online learning system that facilitates student learning, because it can be done anywhere and anytime. It was concluded that the contribution of the iMe can be used as a medium of information for learning systems for the entire community Raharja colleges [1].

13. The research was conducted by Ary Budi Warsito, Indri Handayani and Yusnita Dewi with the titles namely "Sistem Berita Online Berbasis Web Pada Perguruan Tinggi Raharja" in this study discussing news sites that present provide convenience for the community because the development of the website as a means of information is able to present all forms of online news information that is more up-to-date, quickly presented and certainly easily accessible anywhere. The purpose of designing an online news system is to provide alternative solutions that are more effective to Raharja's people, especially in terms of information dissemination using existing information technology [9].

14. Research conducted by Untung Rahardja, By Sholeh, and Fitria Nursetianingsih with the title "PENGGUNAAN DASHBOARD UNTUK MENGONTROL KINERJA ABSENSI PEGAWAI GUNA MENINGKATKAN PROFESIONALISME PEGAWAI PADA PT. SINARMAS LAND PROPERTY". In this study explained the use of dashboards that provide information on employee absenteeism discipline can be used to make company decisions to consider in maintaining employees to work together to achieve the success of the company's business. The data displayed in the dashboard is in the form of an interactive graph so that from the graph the company can find out the performance of attendance from its employees [10].

3. Results and Discussion

3.1 Problem Analysis

In the learning system that runs on Higher Education, currently still using paper media as a means of working on tasks. The use of paper is certainly a manual and monotonous learning method[32]. So that learning activities are considered less attractive and students cannot explore their creativity in learning. In order to keep up with the development of information technology which is increasingly developing over time, a university needs to carry out an innovation in implementing a series of academic activities. In this case, the learning system is implemented [33] there needs to be a new innovation, namely the creation of a learning system that no longer uses paper as a medium for doing tasks. So it's more practical and efficient.

From the problems that have been explained, it can be concluded clearly and in detail about the support system that is reflected in the mind map
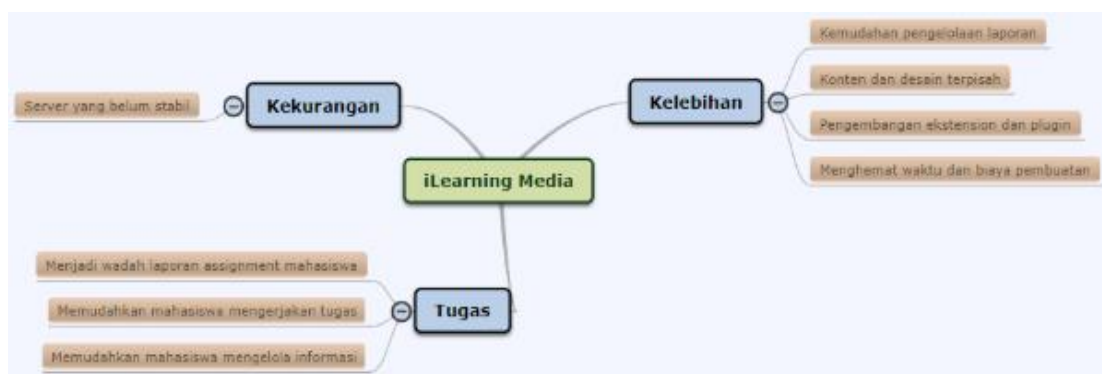

Figure 2. Mind Mapping Content Management System mapping

Explained in the picture above which is the content map system content management system. With the CMS, it is expected that students can more easily manage assignment report data which of course can be accessed by all students wherever and whenever. In addition, the presence of CMS is expected to increase creativity and student motivation. This can also be a good supporting tool in delivering and obtaining accurate information online and up to date.

3.2 Troubleshooting

ILearning Media is a media that provides learning solutions by utilizing information and also communication technology so that learning takes place more enjoyable because it has the concept of learning, playing, praying and working. The system used in this study is part of a system based on iLearning Media, a CMS (Content Management System) from WordPress. WordPress is an open source application (open source) used as a very popular blog engine (blog engine).
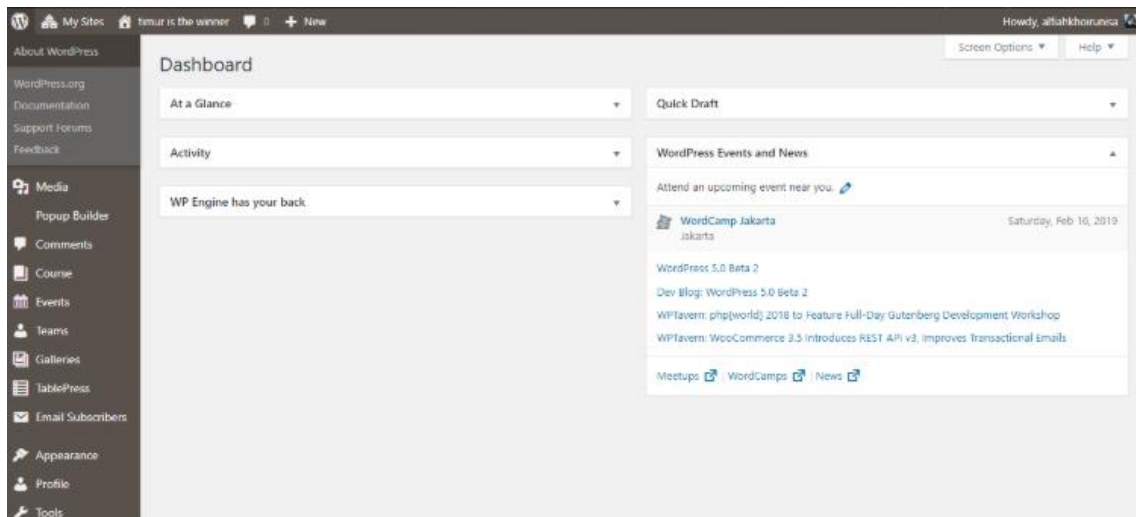
Figure 3. Dashboard Content Management System

The dashboard is the result of insertion or embedding of processed data and appearance. Then in the dashboard design also requires the PHP Code For Post plugin installed on the Content Management System. The PHP Code function for a post itself can also add PHP code to the admin options page and then display the output according to the needs of students just by using shortcodes. Some codes can be used on the post, and some posts can be used the same code snippet, which allows users to use the code repeatedly. Shortcodes can also be used to show HTML content, making it easier for students to add iframes, objects, and other tags issued by editors who post pages.

3.3 Implementation

In the dashboard, there is a Posts menu that contains the entire task report as well as various information contained in the Content Management System.
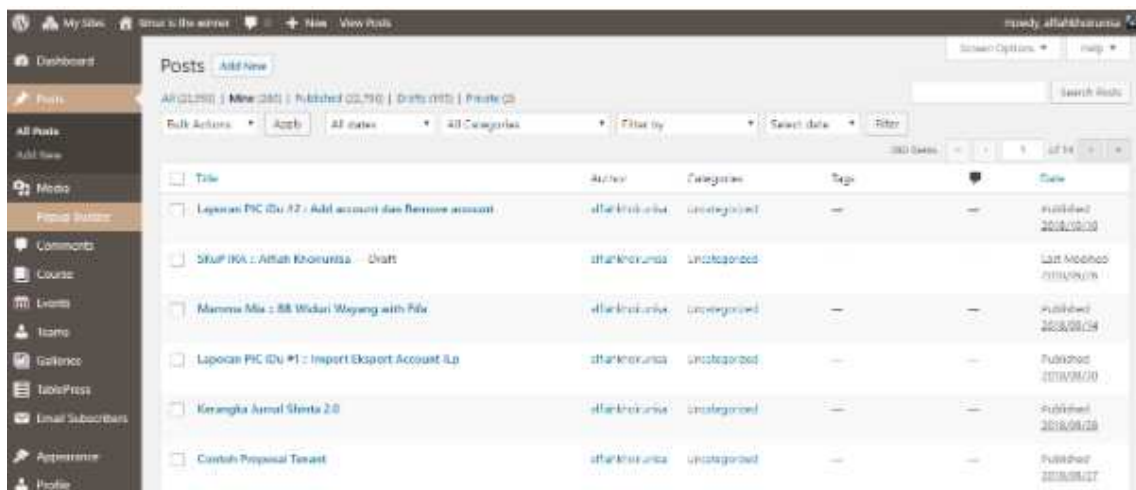

Figure 4. Display the Post menu in the CMS Dashboard

The picture above is a display to see the total posts in one class and the total number of reports that have by one student. There are 5 (five) tabs found on the Post menu, namely:

1. **All:** Is a tab that serves to display the entire post contained in the class.
2. **Mine:** Is a tab that serves to display the entire post that is owned by each student.
3. **Published:** Is a tab that serves to provide information to users about the number of recently published reports.
4. **Draft:** It is a tab that serves to keep our work unresolved.
5. **Private:** It is a tab to provide privacy settings for a report so that it can only be seen by CMS account owners.
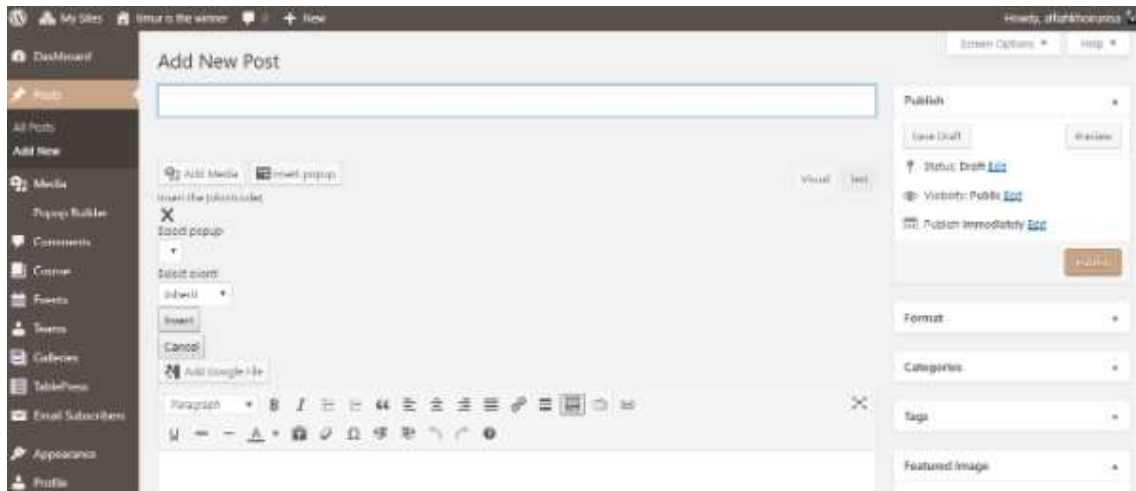

Figure 5. Make a New Post on CMS

The following display is a page for creating new posts or reports that will be done by students.

Figure 6. Insert a Table in a Report

The picture above is an example, to do data management in a report it takes a table that collects data arrangement. Of course, this can make it easier for students to compile various data needed in a report so that the creation of time effectiveness in conducting data search when needed again. To bring up the table as shown in **Figure 6**, a code is needed as follows:

```
b   i   link   b-quote   del   ins   img   ul   ol   li   code   Table   more   gdoc   close tags                    ⤢

<img class="aligncenter" src="https://encrypted-tbn0.gstatic.com/images?
q=tbn:ANd9GcSOLQd7AUNvWVYGRazQRyD8HdQE2KiJiC0IxX67DixK5oaDElheDg" alt="Image result for lemari buku emoji" />
<p style="text-align: center;">SKuP ini berisi tentang laporan progress Buku Alfi, pada penulisan kali ini terdapat
3 penulis yaitu <a href="https://widuri.raharja.info/index.php/Untung_Rahardja" target="_blank" rel="noopener">
<strong>Untung Raharja</strong></a>, <strong><a href="https://widuri.raharja.info/index.php/Qurotul_Aini"
target="_blank" rel="noopener">Qurotul Aini</a></strong> dan <a
href="http://widuri.raharja.info/index.php/Alfiah_Khoirunisa" target="_blank" rel="noopener"><strong>Alfiah
Khoirunisa</strong></a></p>
<p style="text-align: center;">Buku Alfi dapat di lihat <strong><a href="http://timur.ilearning.me/2017/12/22/all-
bab-buku-alfi/">Disini</a></strong></p>
```

Figure 7. Script Coding Table

In addition to inserting tables, report assignments or postings on Content Management Systems it can also be inserted an online mind map that has a function as a translation of student thinking that can be connected properly.

Figure 8. Insert mind mapping on CMS

Mind mapping can be inserted with a code that is also very simple, here is a coded embed mind map.


```
[iframe width="600" height="500" src="https://www.mindomo.com/mindmap/skup-
skripsi-940dcd7000cb43fbbbea6961a5c5f8b5" frameborder="0" allowfullscreen>Your
browser does not support frames. <a href="https://www.mindomo.com/mindmap/skup-
skripsi-940dcd7000cb43fbbbea6961a5c5f8b5" target="_blank">View</a> this map on
its original site. It was created using <a href="https://www.mindomo.com"
target="_blank">Mindomo</a>.</iframe]
```

Figure 9. Script Coding Mind mapping

4. Conclusions

From the research that has been done and displays the optimization of management report assignments on a Content Management System-based website. Then conclusions can be drawn which are considered very effective and efficient as follows:
1. Students can more easily work on assignment reports anywhere and anytime.
2. Students can more easily manage data on each report they have.
3. Can increase student creativity in the exploration of assignment report writing.
4. It has a user-friendly appearance so it makes students more comfortable doing their assignments and can create a fun learning atmosphere.

5. Suggestion

Based on the explanation given above, researching can provide some suggestions regarding optimizing the management of report assignments on the Content Management System-based website as follows:
1. There needs to be more development on the dashboard management report assignment system on a Content Management System-based website to provide information and optimization of usability.
2. There is a need for regular maintenance to avoid errors on the server.
3. Research regarding the management of this report can also be used as an evaluation of the quality of learning in a class.

6. References

[1] Rahardja, U., & Nurdin, I. (2014). Implementasi iMe (iLearning Media) Dalam Mendukung Sistem Pembelajaran iLearning Pada Perguruan Tinggi. CCIT Journal, 8(1), 167-182.
[2] Rahardja, U., Aini, Q., & Khoirunisa, A. (2018). Effect of iDu (iLearning Education) on Lecturer Performance in the Lecture Process. Aptisi Transactions on Management (ATM), 2(2), 140-148.
[3] Rahardja, U., Aini, Q., & Faradilla, F. (2018). Implementasi Viewboard Berbasis Interaktif Javascript Charts Pada Sistem Penilaian Perkuliahan. Jurnal Ilmiah Teknologi Informasi Asia, 12(2), 91-102.
[4] Rahardja, U., & Roihan, A. (2017). Design of Business Intelligence in Learning Systems Using iLearning Media. Universal Journal of Management, 5(5), 227-235.
[5] Hariyanti, E., Werdiningsih, I., & Surendro, K. (2011). Model Pengembangan Dashboard untuk Monitoring dan Evaluasi Kinerja Perguruan Tinggi. JUTI: Jurnal Ilmiah Teknologi Informasi, 9(1), 13-20
[6] Henderi, H., Maimunah, M., & Andrian, R. (2011). Desain Aplikasi E-learning Sebagai Media Pembelajaran Artificial Informatics. CCIT Journal, 4(3), 316-330.
[7] Alkhalaf, Salem, Drew, Steve, Alghamdi, Rayed, Alfarraj, Osama ."E-learning system on higher education institutions in KSA: attitudes and perceptions of faculty members". North Cyprus, Procedia - Social and Behavioral Sciences Volume 47 2012. Diakses dari http://www.sciencedirect.com/science/article/pii/S187704281 2025360 Tanggal 15 Januari 2016 Pukul 03.40 WIB

[8] Hariyanti, E., & Purwanti, E. (2014). Perancangan Sistem Dashboard Untuk Monitoring Indikator Kinerja Universitas. SESINDO 2014, 2014.

[9] Warsito, A. B., Handayani, I., & Dewi, Y. (2016). Sistem Berita Online Berbasis Web Pada Perguruan Tinggi Raharja. SEMNASTEKNOMEDIA ONLINE, 4(1), 4-11.

[10] Rahardja, U., Sholeh, O., & Nursetianingsih, F. (2015). Penggunaan Dashboard untuk Mengontrol Kinerja Absensi Pegawai Guna Meningkatkan Profesionalisme Pegawai pada PT. Sinarmas Land property. SEMNASTEKNOMEDIA ONLINE, 3(1).

[11] Rahardja, U., Handayani, I., & Setiani, L. (2017). Viewboard Sebagai Laporan Jumlah Keseluruhan Artikel Pada iLearning Raharja Ask and News. *CogITo Smart Journal*, *3*(1), 42-55.

[12] Rahardja, U., Tiara, K., & Wijaya, R. I. T. (2014). Penerapan Rinfo Sebagai Media Pendukung Untuk Proses Pembelajaran Pada Perguruan Tinggi Raharja. *CCIT Journal*, *8*(1), 101-115.

[13] Ghasemi, M., Shafeiepour, V., Aslani, M., & Barvayeh, E. (2011). The impact of Information Technology (IT) on modern accounting systems. *Procedia-Social and Behavioral Sciences*, *28*, 112-116.

[14] Suryaputra, F. A., Bandi, B., & Setiawan, D. (2017). Perkembangan Penelitian Kinerja Perbankan di Indonesia. *Jurnal Akuntansi dan Bisnis*, *17*(2), 88-99.

[15] Umiyati, I. (2017). Kualitas Laporan Keuangan, Asimetri Informasi dan Efisiensi Investasi. *Jurnal Akuntansi dan Bisnis*, *17*(1), 39-53.

[16] Rahardja, U., Aini, Q., & Khoirunisa, A. (2017). Implementasi Business Intelligence Menggunakan Highchart pada Sistem Penilaian Absensi berbasis YII Framework. CSRID (Computer Science Research and Its Development Journal), 9(2), 115-124.

[17] Nurmalasari, D., Wahyuni, R. T., & Palapa, Y. (2015). Informational Dashboard untuk Monitoring Sistem Drainase secara Real-Time. Jurnal Nasional Teknik Elektro dan Teknologi Informasi (JNTETI), 4(3).

[18] Kurniawan, A., Kunang, Y. N., & Sari, S. D. P. (2016). Penerapan Dashboard Business Intelligence Pada Penelitian, Pelayanan/Pengabdian Kepada Masyarakat Dan Kerjasama.

[19] Saputro, F. C., Anggraeni, W., & Mukhlason, A. (2012). Pembuatan Dashboard Berbasis Web Sebagai Sarana Evaluasi Diri Berkala untuk Persiapan Penilaian Akreditasi Berdasarkan Standar Badan Akreditasi Nasional Perguruan Tinggi. Jurnal Teknik ITS, 1(1), A397-A402.

[20] Anggoro, D., & Aksani, M. L. (2015). Dashboard Information System Sebagai Pendukung Keputusan dalam Penjualan Tiket Pesawat, Studi Kasus: PT. Nurindo Tour. SISFO, 5.

[21] Sani, N. A., & Prasetyo, A. E. (2015). Pengimplementasian Dashboard Berbasis Web GIS Sebagai Tools Monitoring Reklame (Studi Kasus Kota Surabaya). SESINDO 2015, 2015.

[22] Houghton, R., El Sawy, O. A., Gray, P., Donegan, C., & Joshi, A. (2004). Vigilant information systems for managing enterprises in dynamic supply chains: Real-time dashboards at Western Digital. MIS Quarterly Executive, 3(1), 19-35.

[23] Rahardja, U., Aini, Q., & Hardini, M. (2018). PENERAPAN SOFTWARE AKUNTANSI ONLINE SEBAGAI PENUNJANG PENCATATAN LAPORAN KEUANGAN. *SISFOTENIKA*, *8*(2), 176-187.

[24] Rahardja, U., Aini, Q., & Meytasari, R. (2017). Pemanfaatan Fungsi Etalase Artikel Untuk Meningkatkan Traffic Rank Website ZPreneur. *Technomedia Journal*, *1*(2), 75-89.

[25] Rahardja, U., Moein, A., & Lutfiani, N. Leadership, Competency, Working Motivation and Performance of High Private Education Lecturer with Institution Accreditation B: Area Kopertis IV Banten Province. *Man India*, *97*(24), 179-192.

[26] Renatha, F. A., Satoto, K. I., & Nurhayati, O. D. (2015). Perancangan dan Pengembangan Sistem Informasi Perpustakaan Berbasis Web (Studi Kasus Jurusan Sistem Komputer). Jurnal Teknologi dan Sistem Komputer, 3(3), 343-353.

[27] Mujab, S., Satoto, K. I., & Martono, K. T. (2014). Perancangan Sistem Informasi Akademik Berbasis Mobile Web Studi Kasus di Program Studi Sistem Komputer Universitas Diponegoro (Doctoral dissertation, Diponegoro University).

[28] Putri, W., Permatasasi, N. S., Isnanto, R. R., & Windasari, I. P. (2014). Pengembangan Sistem Informasi Penjualan Dan Pembelian Pada Toko PC Tablet. Jurnal Teknologi dan Sistem Komputer, 2(2), 181-186.

[29] Rahardja, U., Aini, Q., & Thalia, M. B. (2018). Penerapan Menu Konfirmasi Pembayaran Online Berbasis Yii pada Perguruan Tinggi. *Creative Information Technology Journal*, *4*(3), 174-185.

[30] Rahardja, U., Harahap, E. P., & Dewi, S. R. (2019). The Strategy of Enhancing Article Citation and H-Index on SINTA to Improve Tertiary Reputation. *TELKOMNIKA (Telecommunication Computing Electronics and Control)*, *17*(1).

[31] Febriyanto, E., & Yulianto, F. H. N. L. (2018). Penerapan Viewboard Rooster Berbasis Bootstrap Sebagai Penunjang Pelayanan iDuhelp! Pada Perguruan Tinggi. *Jurnal Ilmiah Teknologi Informasi Asia*, *12*(2).

[32] RAHARDJA, Untung et al. Inovasi Perguruan Tinggi Raharja Dalam Era Disruptif Menggunakan Metodologi iLearning. Jurnal Ilmiah Teknologi Informasi Asia, [S.l.], v. 13, n. 1, p. 23-34, jan. 2019. ISSN 2580-8397.

[33] Harjanto, R., Manurung, E. B. P., & Lestari, A. D. (2018). Optimization of Proposal Management Arrangements as Learning Tools in Scientific Research Activities. *Aptisi Transactions on Management (ATM)*, *2*(1), 55-62.