

# **Utilization of Google Spreadsheets as Activity Information Media at the Official Site Alphabet Incubator**

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## **Abstract**

The internet is growing so rapidly and continues to innovate in creating new breakthroughs. Over time, a media is required to be able to display information concisely and is needed in the presentation of information that is effective and efficient. Information on the results of the Alphabet Incubator (AI) activity report can now be easily accessed using the Official Site. However, beforehand the presentation of information in the form of a conventional table, so it is not efficient with current technological developments. Google Spreadsheet is a sheet-making facility that can be used to summarize data in the form of tables and columns, provided by the Google platform that can easily be used for free on Google Drive. By making observations in the form of data collection, by making a direct observation of an existing problem, it is considered less effective and efficient in managing a report of activities carried out conventionally that go through several complicated processes and tend to require a long time so it is very ineffective. There needs to be a system renewal from conventional to online so that the presence of online tables aims to improve effective and efficient workers in managing data collection and activities that were previously done conventionally in the Alphabet Incubator (AI).

## **Keywords**

*Incubator Business, Startup, Google Spreadsheet.*

## **1. Introduction**

Fast and precise information is needed to support life activities. The process of delivering information from time to time is always changing, giving a big influence to the recipients of information [1]. The system and model used will also determine how well and effectively the process of delivering information is running [2]. At present, information is no longer absorbed only by relying on conventional and old-fashioned tools, thus the role of computers is very crucial to provide solutions to problem solving. In addition, computers are also very reliable tools to develop a system that is still lagging behind the age [3].

Effective services will improve the process of business Incubator activities, and can improve the management system of activities that are being implemented [4]. At this moment, every existing Business Incubator is required to compete globally. One key to the success of global competition lies in how efficient and fast service can be provided by the Business Incubator [5].

Alphabet Incubator (AI) is a Research Center that acts as an enterprise that has an ecosystem to successfully create a corporate creativepreneur startup. Alphabet Incubator (AI) plays a role in helping the success of government programs, along with the development of the Industrial Revolution 4.0 contained in RIRN, and increasing campus competitiveness as incubators facing the challenges of the Disruption Era like Business Incubators that have flourished among the public [6].

The Alphabet Incubator (AI) website generally provides information and documentation of activities around the incubator business. So that the data collection process that runs on the Alphabet Incubator (AI) is currently still done conventionally. This conventional process is considered to be less effective and efficient because the process requires a lot of time [7]. According to Untung Rahardja [2014] (7) The Google platform has many free facilities that can be utilized. Therefore the concept was created to make the data collection system for this activity online, by using Google Spreadsheets so that it can be accessed and can be followed by incubator businesses located throughout Indonesia. It is better for us to take advantage of technological sophistication to facilitate all Indonesian incubator businesses to

access information on activities contained in the Alphabet Incubator (AI) [8].

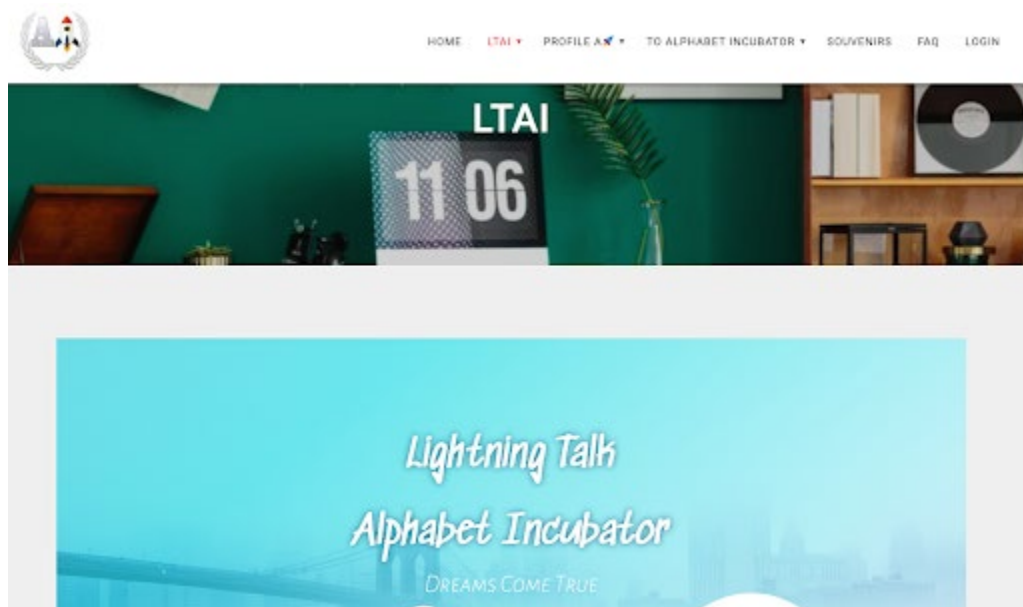


Figure 1. Display of the LTAI Menu

Google Spreadsheet is one of the tools that have been provided by Google for free, can be accessed anywhere and anytime, via mobile, tablet or computer even when there is no internet connection. Summary of data that is still manual requires a long time and when inputting data that is still manual, the results of the data may or may not be inputted or the data is not in accordance with the facts. Whereas if you use Google Spreadsheets online then the data can be updated properly so that it will not experience errors in the data collection or errors in the final results of the data to make a decision [9].

## 2. Problems

Alphabet Incubator is a technology and information based business incubator. Alphabet Incubator currently has various systems that have been developed to make it easy to obtain information effectively and efficiently.

Previously inputting reports of activities using conventional systems and not recorded properly so that if needed need to be re-recorded or recapitulation data using Microsoft Excel moved via USB or hard drive. Then the final results of the conclusions obtained are not feasible because the data obtained is not efficient, besides if it is inputted in Microsoft Excel, the operating division officer can find out that only the input officer, which means the data is still offline. It can be concluded from the problems that have been described above, the application of google spreadsheets on the activity report system can be applied so as to facilitate the operations division officers to get detailed information, and make it easier to get on time information to take a quick and appropriate decision.

So that there needs to be a change, including in the presentation of activities, starting from the conventional way to being modern so that it can facilitate and be understood by the reader in understanding the information presented.

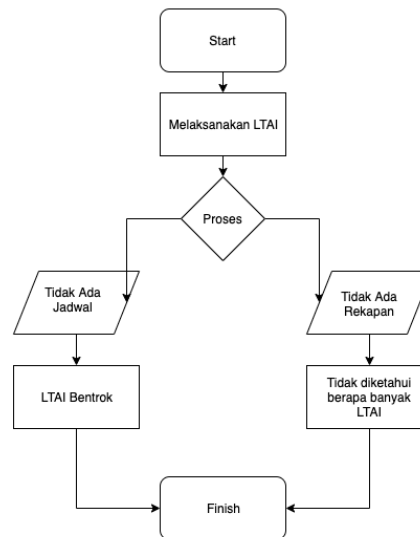


Figure 2. The system that runs

The picture above is a flow chart done by the Alphabet Incubator team manually, that is by looking at notes in Microsoft Excel with data that has been entered into the Online Device.

This study uses an observation method that is collecting data by observing or reviewing it directly at the research location [10]. The research was conducted at Raharja University, which focused on the incubator business department which carried out the process of developing technology with manual methods. So we need a system that facilitates the completion of performance [11].

In this study the literature study method is used, also known as the literature review method, which is done by searching for and collecting theories in the form of scientific material from previous studies that are relevant to this study [12]. There are 7 (seven) literature studies that researchers used as information for this study, including:

1. Research was conducted by W.W. Widayat and Irawadi Jamaran, Technology and business incubators (in this paper hereinafter briefly written as business incubators) are the forerunners of technology-based business organizations developed by higher education for the benefit of a group of community members who wish to develop business organizations [13].
2. Research was conducted by Tri Siwi Agustina, Facilities for increasing resources contained in business incubators include services in the legal aspects of the company, intellectual property rights, accounting, recruitment, education and training as well as research and development (R & D) [14].
3. Research was conducted by Hery Budiyanto, Agus Suprpto, Dina Poerwoningsih, The Student Business Incubator is based on the Decree of the State Minister of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia number 81.2/kep/M.KUKM/VIII/2002 including the Incubator In wall model where incubation is carried out by means of entrepreneurial students being fostered concentrated in a building or area certain management incubators, providing a variety of place and consulting services [15].
4. Subsequent research was conducted by Rokhani Hasbullah, Memen Surahman, Ahmad Yani, Primva Almada Deva, Elisa Nur Faizaty, University Business Incubators in general have several limitations, including limitations in terms of processes, quality and means of incubation, and low financial efficiency and independence. In terms of management aspects, the College Business Incubator has a weakness in the lack of a full-time workforce, experienced management staff and the number of assistants [16].
5. This research conducted by Ismail Rasulong, Edi Jusriadi, Faidul Adzim said that the success of developing a business incubator was greatly influenced by the level of participation of all actors and actors involved in developing the Business Incubator model. Some of the actors who play an important role in this activity are local government and village government, financial institutions, professional organizations of young entrepreneurs, community groups, and universities [17].
6. The research was conducted by Abdul Rahman Rahim, Ismail Rasulong, Edi Jusriadi, Faidul Adzim, Where the strategy of implementing the model of developing young entrepreneurs is through business incubator containers. The trial of the application of the young entrepreneur development model through the business incubator container must begin with the reinforcement of commitment among cross actors, the formulation of training modules, the

formation of action plan development teams, training modules, mentoring modules, and the detailed preparation of the roles of each of the main incubator business actors [18].

7. Research according to Kristianingsih, Ujang Sumarwan, and Rokhani Hasbullah, The success factor of business incubators is the existence of innovation as a culture of business people, good cooperation between universities, business and government incubator technology, expertise of employees, environmental factors, companies that innovate and shared vision in business incubators, incubators respond to local needs, how to shape local structure, new business creation and economic development [19].

From 7 (seven) literature reviews, the business incubator is very influential on the progress of technological development. Experience that business incubators must be effective and specific to business incubators and experts should be able to evaluate business incubators, provide training and training [20]. As a follow-up to the research described above, researchers conducted research in the form of implementing technological developments at the incubator business at the University.

### 3. Troubleshooting

The problems described can be handled in accordance with the proposed plot as will be tailored to the needs of users or communities who access the official site Alphabet Incubator link.

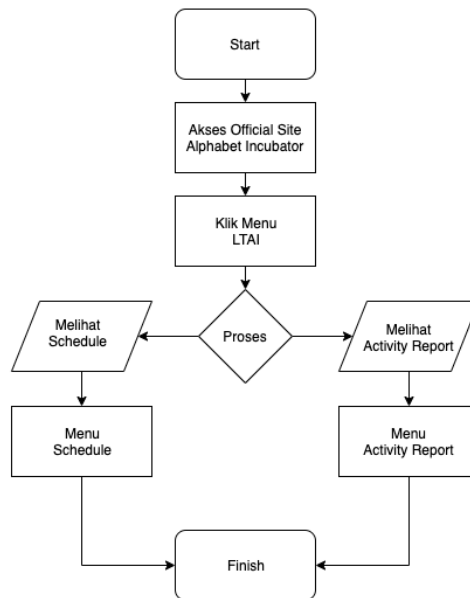


Figure 3. The proposed system

The picture above is the flowchart of the proposed system, namely by looking at the official site Alphabet Incubator, then opening the available LTAI menu then if you want to see the LTAI schedule that has been or hasn't been implemented, click or select menu schedule, but if you want to see LTAI results what has been done can click the activity report menu [21].

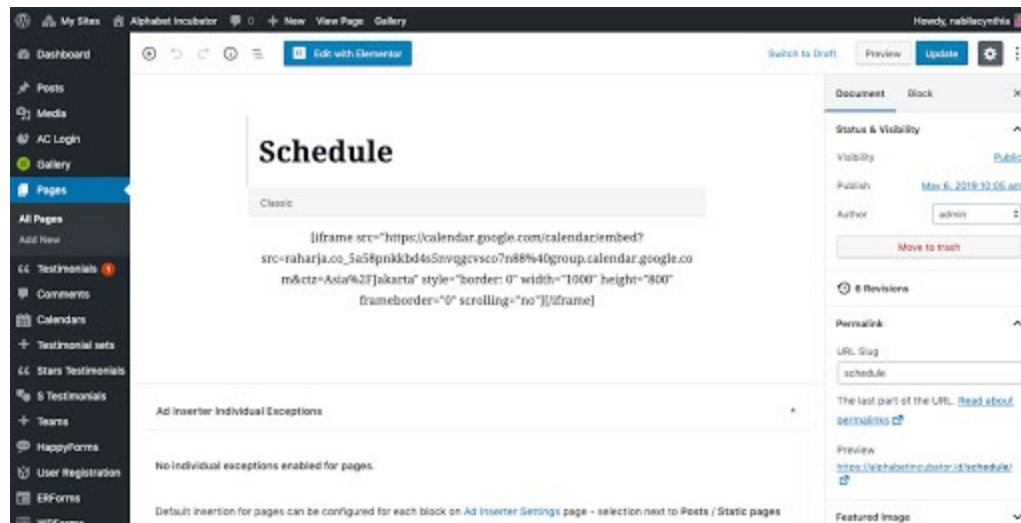


Figure 4. Display of the Schedule menu dashboard

Figure 4. Describes the appearance of the Dashboard Schedule that is made using wordpress, where the schedule menu is one of the important pages that need to be in the official site Alphabet Incubator to be able to find out the activities in the Alphabet Incubator

## Schedule

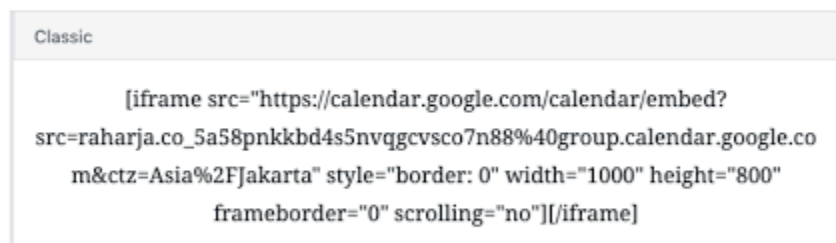


Figure 5. Display of the Schedule menu dashboard

Figure 5. Explaining the results of zooming in from the page Schedule menu where there is a classic table containing the code to embed Google Calendar

Paste the following html code:

```
[iframe
src="https://calendar.google.com/calendar/embed?src=raharja.co_5a58pnkkbd4s5nvqgcvsco7n88%40group.c
alendar.google.com&ctz=Asia%2FJakarta" style="border: 0" width="1000" height="800" frameborder="0"
scrolling="no"][/iframe]
```

```
[iframe src="https://calendar.google.com/calendar/embed?  
src=raharja.co_5a58pnkkbd4s5nvqgcvsco7n88%40group.calendar.google.com&  
ctz=Asia%2FJakarta" style="border: 0" width="1000" height="800"  
frameborder="0" scrolling="no"][/iframe]
```

Figure 6. Display codingan html Schedule menu

Figure 6. Describes the code used to be able to display or embed the Google Calendar so that activities in the Alphabet Incubator can be known with certainty, the following codings are included in the html category, where codingan is still in the easy category

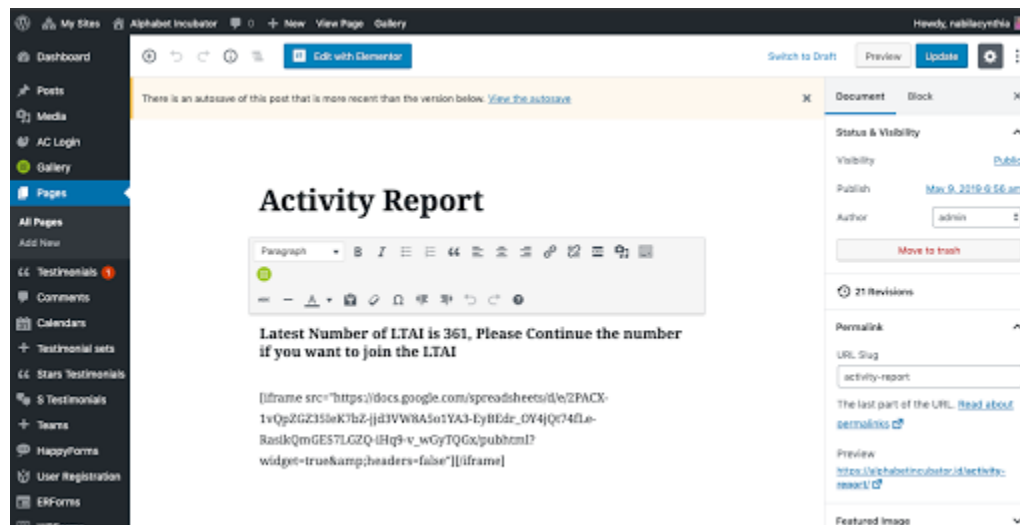


Figure 7. Dashboard view of the Activity Report menu

Figure 7. Describes the display of the Dashboard Activity Report that is made using wordpress, where the activity report menu is one of the important pages that need to be in the official site Alphabet Incubator to be able to find out the activities in the Alphabet Incubator

## Activity Report

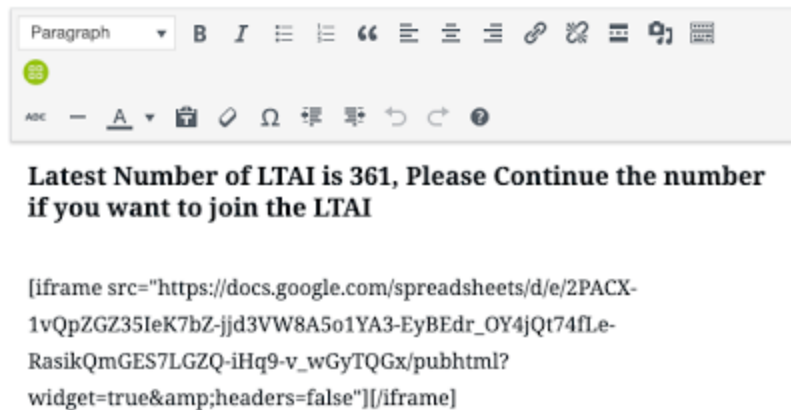


Figure 8. Display of Activity Report

Figure 8. Explaining the results of zoom in from the menu page Activity Report where there is a classic table containing the code to embed the Google Spreadsheet

Paste the following html code:

```
[iframe src="https://docs.google.com/spreadsheets/d/e/2PACX-1vQpZGZ35IeK7bZ-jjd3VW8A5o1YA3-EyBEdr_OY4jQt74fLe-RasikQmGES7LGZQ-iHq9-v_wGyTQGx/pubhtml?widget=true&headers=false"][/iframe]
```

```
[iframe src="https://docs.google.com/spreadsheets/d/e/2PACX-1vQpZGZ35IeK7bZ-jjd3VW8A5o1YA3-EyBEdr_OY4jQt74fLe-RasikQmGES7LGZQ-iHq9-v_wGyTQGx/pubhtml?widget=true&headers=false"][/iframe]
```

Figure 9. Posting Codings Activity Report

Figure 9. Explaining the code used to be able to display or embed a Google Spreadsheet so that activities in the Alphabet Incubator can be known for sure, the following codings are included in the html category, where codingan is still in the easy category

#### 4. Implementation

Can be seen on the LTAI menu on the official site Alphabet Incubator here <https://alphabetincubator.id/>

##### 1. LTAI menu

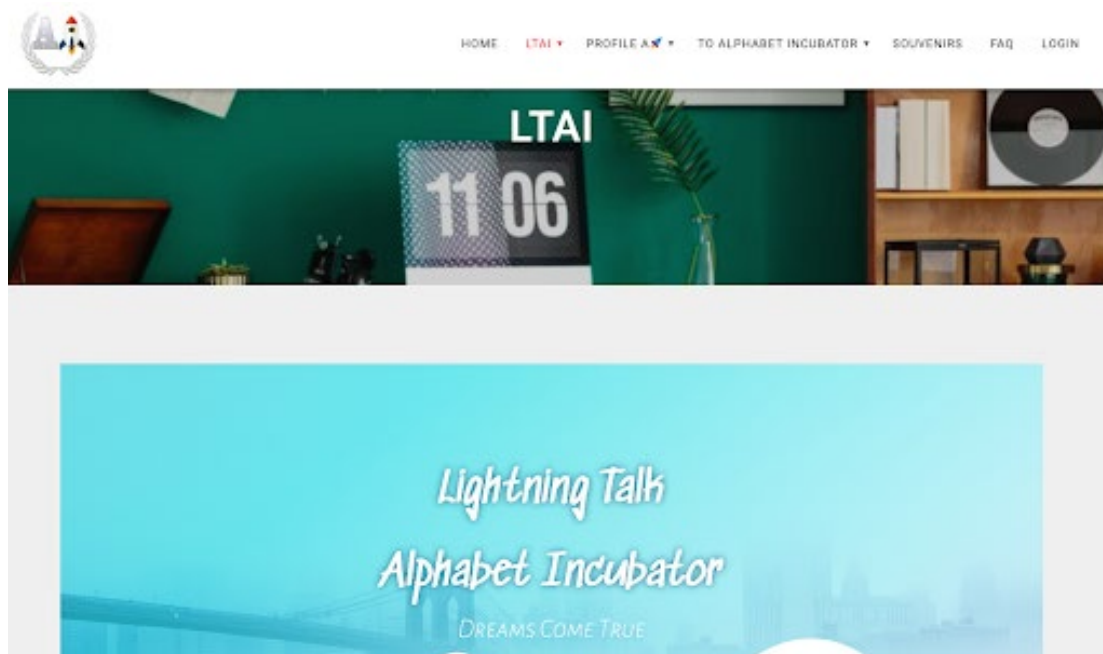


Figure 8. Display of the LTAI Menu

Lightning Talk Alphabet Incubator (LTAI) is a presentation or short conversation about a topic or material delivered by someone with a maximum duration of 10 minutes witnessed by at least one audience and will be recorded and uploaded on YouTube Alphabet Incubator or live streaming directly on the Magics Channel Raharja is done in the AI (Alphabet Incubator) room M-206. The theme of the material to be discussed can be in the form of Journal Guidance, KKP Guidance, Thesis Guidance, other projects can also convey a science.

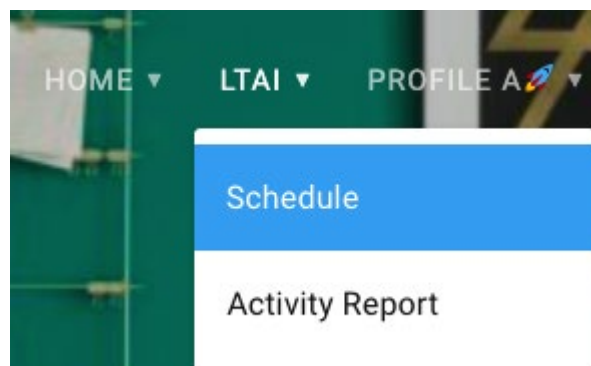


Figure 8. Display of the LTAI Sub menu

There are 2 LTAI sub menus, namely Schedule and Activity Report which are used to find out what activities occur in the Alphabet Incubator (AI)

## 2. Schedule menu

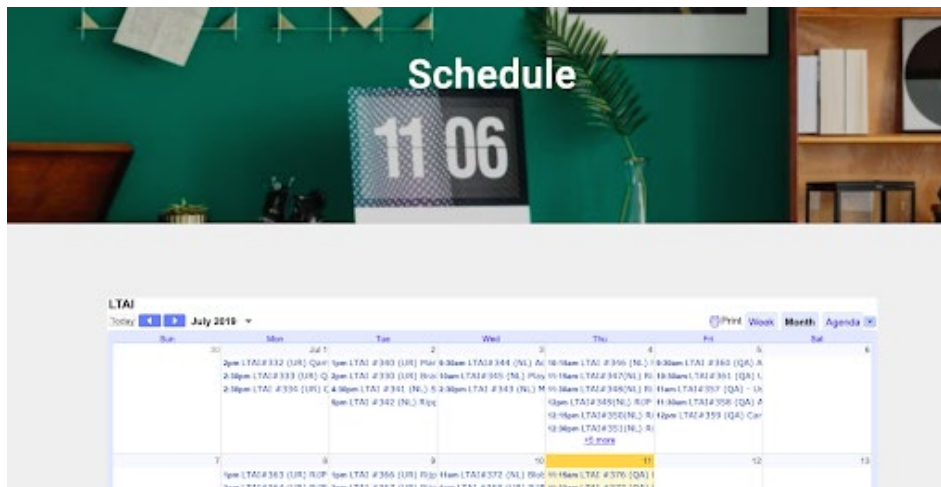


Figure 9. Schedule menu

Schedule menu can be used to find out the LTAI activity schedule every day in the Alphabet Incubator environment, where every day there is a minimum of 3 LTAI scheduled for record.



Figure 10. Calendar Format Agenda

The schedule menu consists of 3 views, it is:

- Week: Weekly calendar
- Month: Monthly calendar
- Agenda: Calendar of activities on one full day, where there are days, dates, months, years and types of activities listed therein

### 3. Activity Report menu

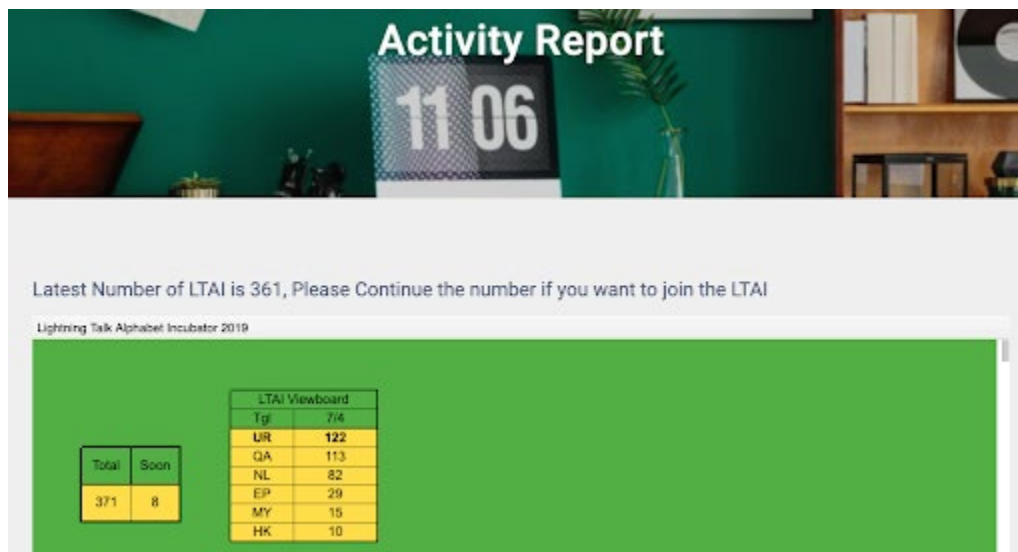


Figure 11. Google Spreadsheet

Display activity report menu that contains the results of embed google spreadsheet that has been recapitulated before. And in the Activity Report menu, there is a sentence that informs that the activity status or the number of LTAI activities was last carried out, which in the picture above informs that the last LTAI performed is LTAI # 361

No	LTAI#	Pembimbing	Nama	Judul	Link youst
372	LTAI#372	NL#2	NL	Teguh	<a href="#">KLIK DIS</a>
371	LTAI#371	UR122	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
370	LTAI#370	UR121	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
369	LTAI#369	UR120	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
368	LTAI#368	UR119	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
367	LTAI#367	UR118	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
366	LTAI#366	UR117	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
365	LTAI#365	UR116	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
364	LTAI#364	UR115	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
363	LTAI#363	UR114	UR	Marviola & Citra	<a href="#">KLIK DIS</a>
361	LTAI#362	QA113	QA	QA	<a href="#">KLIK DIS</a>
360	LTAI#360	QA112	QA	Dian	<a href="#">KLIK DIS</a>
359	LTAI#359	QA111	QA	Radita	<a href="#">KLIK DIS</a>
358	LTAI#358	QA110	QA	Radita	<a href="#">KLIK DIS</a>
357	LTAI#357	QA109	QA	Cheleah	<a href="#">KLIK DIS</a>
348	LTAI#348	NL#1	NL	Tamara	<a href="#">KLIK DIS</a>

Figure 12. Google Spreadsheet

## 5. Conclusion

It can be concluded that the use of Google Spreadsheets on the LTAI menu is in accordance with the needs that you want to display. Then it can be concluded that with this Schedule and Activity Report it can:

1. Schedule and Activity Report display can provide information that is easier and more efficient to find out activities that often occur in the Alphabet Incubator.
2. Schedule and Activity Report display can provide data online.
3. With the appearance of the Schedule and Activity Report the presentation of the vacancies that occur in the Alphabet Incubator can be anticipated.

## References

- Kuntoro, P. T., Untung, R., & Siti, C. (1978). Pengontrolan Mutu Sistem Informasi Dengan Metode Database Self Monitoring. CCIT Journal ISSN, 8282.
- Rahardja, U., Aini, Q., & Putri, D. M. (2018). Pemanfaatan Automated Email System (AEMS) Sebagai Media Notifikasi Penilaian Hasil Belajar. SENSITEK, 1(1), 49-54.

- Rahardja, U., & Nurdin, I. (2014). Implementasi iMe (iLearning Media) Dalam Mendukung Sistem Pembelajaran iLearning Pada Perguruan Tinggi. *CCIT Journal*, 8(1), 167-182.
- Untung, R., Muhamad, Y., & Eva, R. Optimalisasi Key Performance Indicators (KPI) Melalui Pendekatan Balance Scorecard Upaya Mengimplementasikan Performance Management System (PMS) Pada Perguruan Tinggi. *CCIT Journal ISSN*, 6(2).
- Warsito, A. B., & Yusup, M. (2014). Kajian Yii Framework dalam Pengembangan Website Perguruan Tinggi. *CCIT Journal*, 7(3), 437-451.
- <https://untungrahardja.ilearning.me/2019/03/31/why-alphabet-incubator-ai/> diakses pada 11 Juli 2019
- Rahardja, U., Lutfiani, N., & Alpansuri, M. S. (2018). Pemanfaatan Google Formulir Sebagai Sistem Pendaftaran Anggota Pada Website Aptisi. *or. id. SISFOTENIKA*, 8(2), 128-139.
- 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.
- Handayani, I., Kusumahati, H., & Badriah, A. N. (2017). Pemanfaatan Google Spreadsheet Sebagai Media Pembuatan Dashboard pada Official Site iFacility di Perguruan Tinggi. *Sisfotenika*, 7(2), 177-186.
- Nurhaeni, T., Werhan, K., & Hardini, M. (2019). Viewboard Effectiveness on Raharja Internet Cafe Website as Sales Information Submission Media. *Aptisi Transactions on Technopreneurship*, 1(1), 20-26.
- Aini, Q., Rahardja, U., & Allamiah, F. (2018). Perancangan Sistem Absensi Kinerja Pengabdian Tri Dharma secara Online pada Website Berbasis YII Framework. *Sisfotenika*, 8(1), 13-22.
- Yusup, M., Naufal, R. S., & Hardini, M. (2019). Management of Utilizing Data Analysis and Hypothesis Testing in Improving the Quality of Research Reports. *Aptisi Transactions On Management*, 2(2), 159-167.
- Widayat, W. W., & Jamaran, I. (2009). Studi Awal Pengembangan Jaringan Inkubator Teknologi & Bisnis Pada Institusi Pendidikan Tinggi Di Indonesia. *Jurnal Matematika Sains dan Teknologi*, 10(1), 47-53.
- Agustina, T. S. (2011). Peran inkubator bisnis perguruan tinggi dalam meminimalkan resiko kegagalan bagi wirausaha baru pada tahap awal (start-up). *Jurnal Ekonomi dan Bisnis Airlangga (JEBA)| Journal of Economics and Business Airlangga*, 21(1).
- Budyanto, H., Suprpto, A., & Poerwoningsih, D. (2017, September). Program pengembangan kewirausahaan dalam bentuk inkubator bisnis di perguruan tinggi bagi mahasiswa pemilik usaha pemula. In *Seminar Nasional Sistem Informasi (SENASIF) (Vol. 1, No. 1, pp. 385-394)*.
- Hasbullah, R., Surahman, M., Yani, A., Almada, D. P., & Faizaty, E. N. (2015). Peran Inkubator Bisnis Perguruan Tinggi dalam Peningkatan Kinerja Usaha UKM Pangan. *Jurnal Ilmu Pertanian Indonesia*, 20(1), 59-65.
- Rasulong, I., Jusriadi, E., & Adzim, F. (2018). Dampak Implementasi Model Inkubator Bisnis Dan Partisipasi Lintas Aktor Dalam Pengembangangan Wirausahawan Muda Di Wilayah Pesisir Kabupaten Takalar.
- Rahim, A. R., Rasulong, I., Jusriadi, E., & Adzim, F. (2016). Strategi Implementasi Model Pengembangan Wirausahawan Muda Bagi Masyarakat Pesisir Kabupaten Takalar. *Balance*, 14(02).
- Sumarwan, U., & Hasbullah, R. (2017). Faktor-Faktor yang Memengaruhi Kinerja dan Kepuasan Tenan di Inkubator Bisnis IPB. *MANAJEMEN IKM: Jurnal Manajemen Pengembangan Industri Kecil Menengah*, 12(1), 84-92.
- Mungai, D. N., & Njeru, A. (2013). Effect of business incubator services on performance of business ventures at Nairobi incubation lab, Kenya. *International Journal of Science and Research*, 5(5), 1500-1506.
- <https://alphabetincubator.id/schedule/> Diakses pada 12 Juli 2019

## Biographies

**Qurotul Aini** is an Expert Assistant of Information System and Coordinator of the Alphabet Incubator who has a role in helping the success of government programs, along with the development of the Industrial Revolution 4.0 contained in the RIRN, and increasing campus competitiveness as an incubator facing the challenges of the Disruption Era.

**Untung Rahardja** is an Associate Professor for Management Education and Information Systems and the Executive Chairman of University of Raharja, Tangerang Indonesia. For nineteen years, he has been the Head of UR's Information Systems School, a time during which he established the Alphabet Incubator, a facility to foster Creative Innovation Startup in Digital Economy. Passionate about innovative, interdisciplinary and applied BPM, his work has among others initiated research in the areas of quality of education process modelling, gamification process modelling, content-aware process modelling and creative innovation maturity. Untung is the author/editor of five books and 43 scientific journals papers, with more than 280 referred citations, Editorial Board member of ten national/international journals and conferences, and co-inventor of Indonesian patents. His research projects received funding from the ministry of education and industry partners such as MobileCom, Sky Putra Pancasurya. Untung

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**Indri Handayani** is an Active Lecturer in Information Systems concentrated in Business Intelligence at Raharja University, Indonesia. He holds a S.Kom degree in Information Systems concentrated in Business Intelligence from Raharja University and M.T.I in the field of Masters in Informatics Engineering from Raharja University. He has published 60 scientific journals of national repute. He has completed a research project with student guidance on RINFO, iMe, CCIT Journal, RCEP, Technomedia Journal, iLearning Journal Center, iFacility, iBuHelp Viewbord! Offline, Viewboard Rooster, PESSTA +. His research interests include the iLearning learning system and system development.

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