

Student Internships: A Selective Review

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Abstract— The internship is the process that involves the interns being employed in an organization for a part-time period while at the same time, receive academic credit for their contribution to the workplace with the optionality of monetary compensation for the interns. This article presents a selective survey of student internships with more focus on some issues associated with internships and internship management systems such as the traditional paper-based approach, student satisfaction with the internships, and mismatch in internships placements. In addition, a comparison between three existing internship management systems namely ImBlaze, LetsIntern, and AP Link was reported.

Keywords— internship management system,

I. INTRODUCTION

Internship placement is an opportunity for students to gain practical and theoretical learning that will be essential for them for a smooth transition into the workforce. Securing an internship placement can be a challenging process by itself as it will require comprehensive preparation from a student to secure a placement slot from a company. However, securing an internship placement will not benefit much if the placement does not provide the appropriate learning experience for the student to acquire job-relevant skills that fit their field of study.

Effective industrial training helps to ensure a reliable learning experience through integrating the academic knowledge the student gain from the institution with the practical knowledge the opportunities offered. However, based on [1], there is an issue exists in the form of mismatch expectation between the student and company. This problem can be contributed by the anticipation of the student to expect the training as they complete their internship whereas the company expects the student to be well trained before the starting of their internship. The process for acquiring an internship placement has slowly transitioned from manual technology to modern technology such as internship management systems for processing internship-related documents.

However, the transition has not been smooth as some host companies prefer to use manual methods for handling their internship document processing. In this work, a selective review of internship management system issues and some of the existing internship management systems were reported. Section II highlights the issues associated with internship management systems. The existing internship management systems were given in Section III. Finally, the conclusion was given in Section IV.

II. INTERNSHIP MANAGEMENT SYSTEMS ISSUES

The internship is the process that involves the interns being employed in an organization for a part-time period while at the same time, receive academic credit for their contribution to the workplace with the optionality of monetary compensation for the interns [2]. Apart from that, the internship also provides a platform for engagement between students and their workplace with the main purpose of allowing the students to gain hands-on experiences that can further enhance or improve their understanding of their area of study. This section highlights some of the issues associated with the internships and internship management systems such as the traditional paper-based approach, student satisfaction with the internships, and mismatch in internships placements.

A. Traditional Paper-based Approach

As mentioned in the introduction, the process for acquiring an internship placement has slowly transitioned from a traditional paper-based approach to modern technology such as internship management systems. The work in [3] stated that many problems can arise due to the processes being done manually for the internship placement process such as missing data, data redundancy, communication issues, interruption in the grading process, and most importantly, the overall process of monitoring the student progress. These issues happen because the traditional paper-based approach for the preparation of internship documents and reports for the internship placement makes the process cost consuming for every party. This approach will have a huge burden on climate change and the environment as many trees will be cut down for the demand of the paper. The following statement can be proven with the current changes in climate due to the increase in global carbon emission [4], as the activities of deforestation contributed to the upward of 15% of the global carbon emission which is significantly higher than the total global carbon emission for both the cars and trucks on the world's road combined. Other than that, this approach to the preparation of the various reports can also be time-consuming for the institution, company, and student as the waste of the human effort can be used to perform other tasks. According to [3], the process for internship application is time-consuming as the process begins with the student required to complete the registration process manually by filling and writing in their relevant information in a document.

Furthermore, the process of checking the eligibility for internship placement for the student will be done in a manual checking process that can contribute to higher time consumption. In addition, the paper-based approach can also



contribute to security risk due to the possibility of a loss of student placement documents such as resume and other important documents that tend to happen due to the manual process in handling a large number of documents [3]. Other than that, the manual process contributed to the issue of missing documents as students will be required to submit their weekly reports manually via fax or postal mail. This approach could cause a delay in receiving the documents to the respective lecturers or even the possibility no to receive them [3].

B. Student Satisfaction with Internships

According to research conducted by [5] to study the impact of the internship toward the perceptions of the careers in hospitality and tourism for undergraduate students, an effective internship management system can make a major impact in reinforcing the relationship and cooperation between the company and university. Other than that, the researcher also stated that interns can be encouraged to provide feedback on both the internship program and the intern company with the utilization of an effective performance appraisal system. Hence, the student satisfaction and perception toward their relevant industry can be improved with the proper internship management system with the function of feedback and performance appraisal.

The statement above is supported by the work conducted by [6] on the internship management of hotel management industries for higher vocational college. Their work shows the need to establish a scientific internship management system for the interns that conduct their industrial training in hotel management industries as the lack of a proper internship management system can lead to a lack of efficiency in directing the interns during the management process. This has been stated by the researchers as it will eventually lead to poor learning outcomes during the process of internships.

Aside from that, the work conducted by [7] showed the finding of undergraduate students from a British university opting out of the internship due to the lack of support provided by their university. The finding shows that one of the respondents stated that the lack of active support for the internship placement system has led to the dissatisfaction of getting a proper internship placement abroad. Based on the statement, the lack of support can also mean that the university failed to facilitate a proper internship management system.

Another aspect was considered in the work conducted by [8] which focused to study the challenges faced by students and teachers in Montreal - Canada during their internships. About 13% of the respondents stated that university mentors do not provide enough support and guidance when it comes to feedback, availability or even interest. Aside from that, additional research was conducted to gather the respondents' opinions on the way ICT helped them in overcoming the teaching problems during internships. Based on the data analysis, 29% of the respondents stated that ICT solution increased their access to a variety of teaching resources. Based on the result of the data analysis, it shows that the usage of ICT can allow in increasing relationships and communication between students and their university mentors during the internship period.

This study shows that a specific information system can be used to significantly improve the social interactions between students and university mentors [8].

C. Mismatch in Internship Placement

The occurrence of mismatch within an internship placement can have numerous side effects on the development of the student and their host company. This issue is stated by [9] that internship could have a negative effect on students' future careers. The mismatch within an internship placement could have a ripple effect that can lead to an initial employer-employee mismatch which can cause persistent traumatizing effects toward the graduate. Moreover, poor internship experience can lead to difficulties in job hunting, which will cause a prolonged period of early unemployment [9]. Hence, the prospect of getting a matching student experience and company expectation should be taken seriously as it will have a long-lasting effect on the early phase of the student career.

Similar research conducted by [10] showed the finding of the overall percentage of students rating toward their host company after they completed their internship placement to be relatively above average and good. However, the percentage of the host companies to provide training that is related to the student field of study and the maximum opportunity for training was relatively lower compared to the percentage of the host company to provide a real job experience or supportive of the internship program. This finding shows that the occurrence of internship mismatch is slightly higher due to the irrelevant training that was provided to the student field of study. In addition, the host company to provide the maximum opportunity for training is the second lowest-rated among the student.

Another similar research showed that the unemployment rate for graduates mismatches the graduates' skills, and the need for proper employment systems is on the rise [11]. Besides that, numerous efforts have been undertaken by the Ministry of Human Resource (MOHR) Graduate Training Scheme (GST) to assist the unemployed graduates in Malaysia to ensure they can secure the right skills for their employment.

D. Web Development for Internship Management System

Web-based internship systems must focus on the quality of accessibility for the systems [12]. In their research [12], an analysis was carried out to study the effectiveness of their internship management system that allows students to document their work in the form of portfolios throughout their period of internship. Their research concludes with the accessibility of the system can be contributed from the proper arrangement of the content that supports students in processing their data and observation from lecturers.

As for the main function of the web-based internship management system, the satisfaction of the student are rise when they are able to document their work report in the form of an electronic portfolio using a web-based internship system that specialize in documenting and monitoring the progress of their student throughout their period of internship [12]. In their research [12], the functionality of e-portfolio can greatly benefit the student as it provides a means to easily access, and then the student can document their intern report during the internship program. In addition, it also provides an effective means for the lecturer to monitor the progress of their assigned students. Hence, the research shows that electronic portfolio is a necessary function for a web-based internship management system as it can benefits both the students that will document their weekly intern report and the



lecturer that can easily monitor the weekly report of their assigned students.

Besides that, the electronic-portfolio submitted by the students will have a feedback feature that comes in the form of a comment filed that can be beneficial for both the students and lecturer as it allows them to ask questions based on the work submitted by the students. Hence, a simple comment function is recommended to be implemented in the webbased internship management system as it can have a major effect on the monitoring process for the students' industrial training progress.

The statement above is supported by the work conducted by [13] on student's responses toward the usage of online journal systems for internship purposes. Their research shows that students' responses are positive toward the implementation of the online internship journal system as it allows the interns to easily document the learning process that they obtained from their internship period. The reason for the positive response of the students could come from the wide array of benefits such as building a connection bridge between the students, lecturer and work sites supervisor, allow students to review what they learned from their internship, and allow students the opportunity of reflection upon what they learned from their internship experience.

Other than that, the work reported in [14] for the development of their internship monitoring system highlighted the importance of a feedback feature for the system as it will allow the user to provide feedback for the system so the usability of the system can be enhanced through the feedback. They also proposed a forum feature that can be used by the students to encourage communication with each other based on the internship topic.

III. EXISTING INTERNSHIP MANAGEMENT SYSTEMS

This section covers three existing internship management systems namely *ImBlaze*, *LetsIntern*, and *AP Link*. A comparison between them is reported.

A. ImBlaze

ImBlaze is an internship management system that operates on mobile platforms by supporting student interest by linking them to community mentors for internship purposes. Interested students may seek their internships through ImBlaze which will link their interest to specific realworld projects while at the same time support the internship work site as well [15].

According to [16], the principle *ImBlaze* revolves around is the automation of the business process that many schools deemed as a difficulty for them to introduce a high-quality internship program. According to [16], as for the type of features, *ImBlaze* added mobile transactions, remote connectivity, and location verification through a mobile device or a device application that can run on either Android or iOS operating system with the purpose of easing the burden of implementing and managing internship from school. Aside from that, their application has been stated to be able to overcome geographical separation and enable 24/7 and 365 connectivity at all the time. Other than that, the common interface implemented for all users includes functions such as attendance, communication, and feedback.

In addition, institutions can also monitor and track their students' attendance [17].

As for students, they can "Request to Pursue" when they found the internships that align with their interests. Next, the internship coordinator from the student institution will decide whether to approve the following request. If approved, the student will have to prepare to secure for their placement [17]. According to [16], the system is extended with *LinkedIn* integration which will allow the student to use additional features that exist in LinkedIn such as building a resume and portfolio, provide recommendations to peer or mentor, and many more.

As for the payment method, *ImBlaze* utilizes a service-assubscription model, with the pricing based on the initial setup fee with the subscription rate based on the total number of students that use the platform. The subscription model will also include a wide array of online training for the university [16].

B. LetsIntern

LetsIntern is essentially an application that is designed to cater to students that looking for internship placement across the globe [18]. The students will be required to register an account before they can begin applying for internship placement. The web-based platform of the application allows users to browse the list of companies and employers that have posted their job placements in the system. After registering an account, the student can begin looking for an internship position that interests him/her. After successfully receive a reply and completed the interview process, the student can officially begin the internship placement after receiving the offer letter from the company.

By comparison, *LetsIntern* has a lesser intricate function compared to other similar systems because it only handles the basic features such as profile manager, job posting advertisement manager, manage candidate status and notify the shortlisted candidate.

C. AP Link

AP Link is specially catered toward undergraduates of Asia Pacific University of Technology and Innovation (APU) with the main purpose of fulfilling the academic process of the internship [19].

As for the function that the system provides, it covers all the basic pre-requisite of an internship system such as login, account manager, search placement, document upload, and many more. As the major differences between $AP\ Link$ and the other system, $AP\ Link$ has a portfolio feature that allows students to enhance their employability chances with employers that use the system [19]. Other than that, it has a built-in weekly report feature where the student will be required to publish the work completed by them every week so that the academic mentor can review their learning outcome.

Undergraduates from APU can enhance their portfolio by adding a personal statement about themselves, listing their education, experience, project, and even their skills. Aside from that, the student can also include their external details such as their Facebook account, LinkedIn account, and past project such as websites.



As for the step to use the system, the students of APU can begin by setting up their accounts and profiles through the *AP Link* page. Before the student can begin the application process, they will be required to submit their internship declaration that will be received from the APU administration. At the same time, the student will be required to submit their resume/CV form to the academic mentor for the internship approval process. As the submission has been approved, the student can begin searching and applying for internship placement from the *AP Link* page. The system will display a list of employers and companies that have registered in the system. Finally, once the student receives the job offer, they can either accept or ignore it.

Comparison between the Existing Internship Management Systems

A comparison between these three internship management systems is listed in Table I. Various features were used in the comparison including the target users, the platform the system supports, mobile compatibility, portfolio management, attendance tracking via GPS, training and support offered by the system, user feedback feature, and student and employer payment structure.

It can be seen from this table that the systems have different features. However, all of them are mobile compatible. *AP Link* has portfolio management, while *ImBlaze* offers attendance tracking via GPS and training and support.

TABLE I. COMPARISON BETWEEN ImBlaze, LetsIntern and AP Link

| | ImBlaze | LetsIntern | AP Link |
|-----------------------|--------------|--------------|----------|
| Target Users | All | All | APU |
| | Students | Students | Students |
| Platform | X | $\sqrt{}$ | √ |
| Support – Web | | | |
| Platform | V | V | X |
| Support – Android, | | | |
| iOS | | | |
| Mobile Compatible | V | V | V |
| Portfolio | X | X | V |
| Management | | | , |
| Attendance | √ | X | X |
| Tracking via | | | |
| GPS | | | |
| Training and | V | X | X |
| Support | | | |
| User | √ | X | √ |
| Feedback | | | |
| Feature | | | |
| Student | Service-as- | Free | Free |
| Payment | subscription | | |
| Structure | model | | |
| Employer | Service-as- | Service-as- | Free |
| Payment | subscription | subscription | |
| Structure | model | model | |

IV. CONCULSIONS

The internship is essential to help students to gain practical and theoretical learning for a smooth transition into the workforce. This article presented a selective survey of student internships with more focus on some issues associated with internships and internship management systems such as the traditional paper-based approach, student satisfaction with the internships, and mismatch in internships placements. A comparison between three existing internship management systems namely *ImBlaze*, *LetsIntern*, and *AP Link* was reported.

Based on the conducted review, the following features can be considered as important to be included in internship management systems:

- Portfolio management: This allows students to enhance their employability chances with employers that use the system
- Company profile: This will benefit both students and host companies as it can avoid the chances of mismatch internship placement which will result in the waste of time and resources for both parties. The company detail can come in the form of feedback from the previous interns in the following company.
- Allow students to communicate with the past intern from the company to gain more understanding of the workplace. This will allow students to secure a suitable placement that fit their current skillset and company expectation.
- The feedback feature that will allow students and host companies the opportunities to use the feedback to improve and enhance themselves.

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