

Please cite this article as: H.Haron, H. Abd Samad, . Juanita, J. Ahmad, R. Darus, S.F. Miserom. Study On Kuptm Alumni Portal Based on Creativity and Innovative Process. The Asian Journal of Professional and Business Studies, Volume 3 (1).

STUDY ON KUPTM ALUMNI PORTAL BASED ON CREATIVITY AND INNOVATIVE PROCESS

¹Nor Hafiza Haron*

afieza@kuptm.edu.my

²Nor Hafiza Abd Samad

hafiza@kuptm.edu.my

³Anis Juanita Mohd Zainudin

anis_juanita@kuptm.edu.my

⁴Jihadah Ahmad

jihadah@gapps.kptm.edu.my

⁵Roziyah Darus

roziyah@gapps.kptm.edu.my

⁶Siti Faizah Miserom

Siti faizah@kuptm.edu.my

Corresponding author*

^{1,2,3,4,5,6} *Faculties of Computing and Multimedia of Kolej Universiti Poly-tech MARA (KUPTM Kuala Lumpur 56100, Malaysia*

ABSTRACT

Numerous institutions and colleges in higher education have supported the establishment of alumni associations in the past few years. This is to guarantee that there are avenues for networking and engagement between the university and alumni, as well as among alumni. If any of these associations desire alumni involvement and participation, they should invest in creating a user-friendly online website. Universities' alumni are, without a doubt, one of their most important assets. As a result of their achievements, they have come to an agreement to increase their outreach to the institution. Furthermore, it is typical for higher education institutions to keep former students engaging in academic activities and other events. Consequently, the goal of this study is to establish an alumni web portal and its associated organizations. In order to assess the creative approach to developing the site, a technique known as SCAMPER was applied. We also suggest creating a portal prototype that meets the existing design and marketplace criteria.

ARTICLE INFO

Keywords:

Alumni Association,
Alumni,
SCAMPER technique,
Prototype,

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur.

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

1.0 Introduction

Technological advances in information technology and globalization have transformed how people communicate and build a robust business model in networks of their relationships. People also believed that the rapid changing of media and information technology could affect their minds in order to think more creatively. The democratization of computer usage and the emergence of the fast internet, particularly, have enabled a huge number of people to employ new computational tools and have access to a wide variety of informative components (Bonnardel & Zenasni, 2010). Thus, technology plays an important role in encouraging individuals or the community to boost and enhance their thinking by utilizing related skills. Furthermore, existing research shows that creativity can be supported by emerging technologies used in our environment (Yalcinalp & Avci, 2019).

Technologies, especially the internet, have brought significant influences and advantages to millions of people in the global world. We can easily imagine that everything will conduct as online as the internet connection remains connected and smoothly running. Virtual communities can also be created by using the internet and tools related to appreciating the advancement of technology in society. This could approach people to share on common interests, which is to allow data sharing and to collaborate among each other.

As per Stolterman et al. (1997), a virtual community is a social entity. It is a notion established to depict some of the emerging social “life forms” we are starting to see in Cyberspace (Stolterman et al., 1997). Additionally, it is a group of individuals who communicate with one another via technology. Virtual communities are also utilized for business, edutainment, and entertainment, among other things. Furthermore, due to the Covid-19 pandemic, virtual communities are almost held in synchronous or asynchronous using a variety of available platforms. This also enables things to take place independent of geographical location, physical touch, or timeframe.

Corporate portals, libraries, teaching and learning portals, and alumni associations are further types or uses of these communities. People can extend their interaction beyond physical proximity or usual time in this form of virtual or cyberspace. Keeping alumni engaged in their educational institutions is a recurrent problem in this study. This would also include encouraging graduates to maintain long-term interaction in the educational area. The university reputation is validated by the alumni’s experiences during the university course, demonstrating the institution’s beneficial impact on society. As per Chi et al. (2012), alumni are individuals who embody the university in the everyday world.

A former student or graduate student of an institution or university is referred to as an alumnus (Parmar et al., 2017). As per Barnard (2007), a group of alumni has a tremendous deal of potential to contribute socially, strategically, and financially to an educational institution’s credibility in a dynamically competitive and changing market. The institution may be able to generate a win-win scenario due to this coordinated network of interactions. Nevertheless, an alumni association’s effective development may be hindered by the scarcity of current alumni data.

Creating an interactive and virtual portal is one approach to strengthen the link between educational institutions and alumni. It will also give important information to alumni in order to help them stay connected with the university. More importantly, finding an unusual response or producing something entirely new to typical problems necessitates the development of new options or solutions based on various sets of information derived through experiences or search procedures (Tidd et al., 2008).

Therefore, creative and innovative approaches can help create an engaging alumni portal that enables them to stay in touch with the institution and their colleagues. To do so, it is vital to correctly organize the initiative to get better outcomes, taking into account a number of elements that might consolidate or corrupt an alumni association’s web portal. As a result, the study aims to answer the following question: what features should be addressed when creating a new appealing site by evaluating alumni online portals? In addition, it will look into the issues that arise from the interaction between alumni and universities.

Thus, based on the creative technique called SCAMPER, we propose a prototype portal of an alumni association that encourages the construction of a network of relationships among alumni and institutions of higher education. The literature

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

review on the next part will serve as a basis for the planning and proposal of an online portal of an alumni association. It will also contribute to academic reflections on this subject and, in practical terms, collaborating with educational projects benefiting the alumni and educational institutions, especially at Kolej Universiti Poly-Tech Mara (KUPTM). This research's approach includes qualitative research centered on a literature review and a suggestion of ideas to address identified organizational issues.

2.0 Literature Review

Alumni Association

Alumni act as a spokesperson of the university, helping to maintain its history and traditions. This is to ensure the organization's long-term longevity. For example, dos Santos Teixeira and Maccari (2014) stated the following roles of the alumni association.

- a. To offer a variety of communication tools, namely electronic mail.
- b. To include all members of the institution's personnel in student engagement.
- c. To guarantee that the alumni association's mission, objectives, and programs are in line with the educational institution's goals.
- d. To enlighten students and alumni about the association's institutional mission, objectives, and programs.
- e. To get input from alumni so that services can be better aligned with future and current requirements.
- f. To include them in any planning process to establish or amend the association's mission by allowing them to contribute thoughts and ideas.
- g. To guarantee that the alumni's personal information is handled appropriately and confidentially.
- h. To urge alumni to participate and fund in the association's services, activities, and events.

In addition, Brant and Regan (2002) claimed that alumni associations are in the business of making connections, and via these connections, they encourage the institution's growth. However, it is almost always challenging to quantify the project's effects, necessitating additional effort to assess and quantify the strong connections with alumni. As a result, it is critical for an educational institution to develop and sustain positive relationships with its students and alumni by including them in decision-making and developing a network of relationships, all of which contribute to the university's worldwide success. Nonetheless, this necessitates the construction of an open and direct line of communication with students in order to ensure that timely information is delivered (Barnard, 2007).

Previous research on alumni associations has revealed a number of difficulties in terms of their implementation, success, and even interest in this organization type. As per Barnard (2007), maintaining highly valued relationships with alumni is difficult, but spreading information on alumni association online portals is even more difficult. This is because information must be generic enough to be understood while customized properly to intrigue the target audience's interest.

Innovative Processes and Creative Techniques

Across disciplines, creativity may be defined as the creation of beneficial solutions to challenges, as well as engaging and innovative products and ideas (George & Zhou, 2001). Thus, creativity is linked to the product production and artistic realm as well as engineering, science, problem-solving, and innovative thinking (Henriksen et al., 2018).

On the other hand, the idea of innovation is always evolving and may take various forms based on its frequency, dimensions, outputs, and processing. Countless research has been conducted on the issue, and the criteria for classifying creativity and creating conditions that foster innovation are becoming increasingly evident (Cagnazzo et al., 2008). Before starting with the process of innovation, the creative thinking technique would be applied in order to brainstorm and encapsulate the idea, especially in producing an alumni portal. Thus, the author suggests that the SCAMPER technique would be the relevant method on the ways of thinking approach in order to solve the problem in the innovative process.

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Aside from that, the authors identify the most appropriate thinking style as incremental innovation in the first phase of this research. This is due to the fact that while innovation might occasionally include intermittent shifts starting from scratch, most of the time, the items are not new to the world. In such a case, an innovation might be defined as creating new possibilities by combining several sets of knowledge in answer to a stated or unstated need.

3.0 Methodology

The approach employed in this study is a combination of quantitative and qualitative techniques and research. The strategy relies on a suggestion of plans and literature review to address identified organizational challenges. Additionally, this research recommends plans based on a literature review of social networks, innovative processes, and alumni associations as a research strategy. Similarly, data collection consisted of a simple search of social media networks and alumni association websites for benchmarking and applying the SCAMPER approach. Likewise, using the quantitative approach, a preliminary survey was done to gather information. Hence, we suggest a portal prototype for an alumni association founded on this structure in order to obtain maximum participation via the use of the right strategy and planning.

4.0 Result

The results from this study are composed of two categories. The first specifically was from the literature review that took into account the KUPTM portals' unique features and characteristics. These would specifically on the design and prototype of the system. The second category would be the SCAMPER technique's summarization to recommend an innovative website and portal. Therefore, the system's modules are as follows:

Alumni Portal Website

- a. Register New User (Alumni & Admin)
 - ✓ Alumni users need to register a new user and respond to the alumni membership consent form.
 - ✓ Super admin can assign the new admin role to any new alumni staff.
- b. Manage User Profile (Alumni & Admin)
 - ✓ Alumni user can manage their own profile.
 - ✓ Admin can manage all users' profiles.
- c. Manage Alumni Highlights (Admin)
 - ✓ Admin can manage alumni highlights regularly.
- d. Manage News and Events (Admin)
 - ✓ Admin can manage news and events regularly.
- e. Manage Alumni Gallery (Admin)
 - ✓ Admin can manage alumni gallery regularly.
- f. Dynamic and Interactive Websites
 - ✓ The website should provide interactive and dynamic features, such as active user status, personal chatting messages, and bulletin board.

Alumni Tracer System

- a. Register New User (Admin)
 - ✓ Super admin can assign the new admin role to any new alumni staff.
- b. Upload Alumni Data (Admin)
 - ✓ Admin can upload alumni data into the system using CSV file format.
- c. Manage Survey Question (Admin)
 - ✓ Admin can manage (create/update/delete/view) survey questions.
- d. Auto blast Survey Link
 - ✓ The system will auto blast survey links to alumni through WhatsApp/SMS/email.
- e. Manage Alumni Tracer Report
 - ✓ A report is generated based on selection parameter input by the admin.

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

- ✓ Admin can view and print the report in pdf format.

Meanwhile, the target user involved in this system will be the administrator (super admin) for the portal and the KUPTM Alumni. Next, Table 1 will be the summarization of the SCAMPER technique used for the alumni web portal. Furthermore, it involves only a few steps in the technique, which is related to the requirement of the portal or system.

Table 1 SCAMPER technique for ALUMNI web Portal (adopted by author)

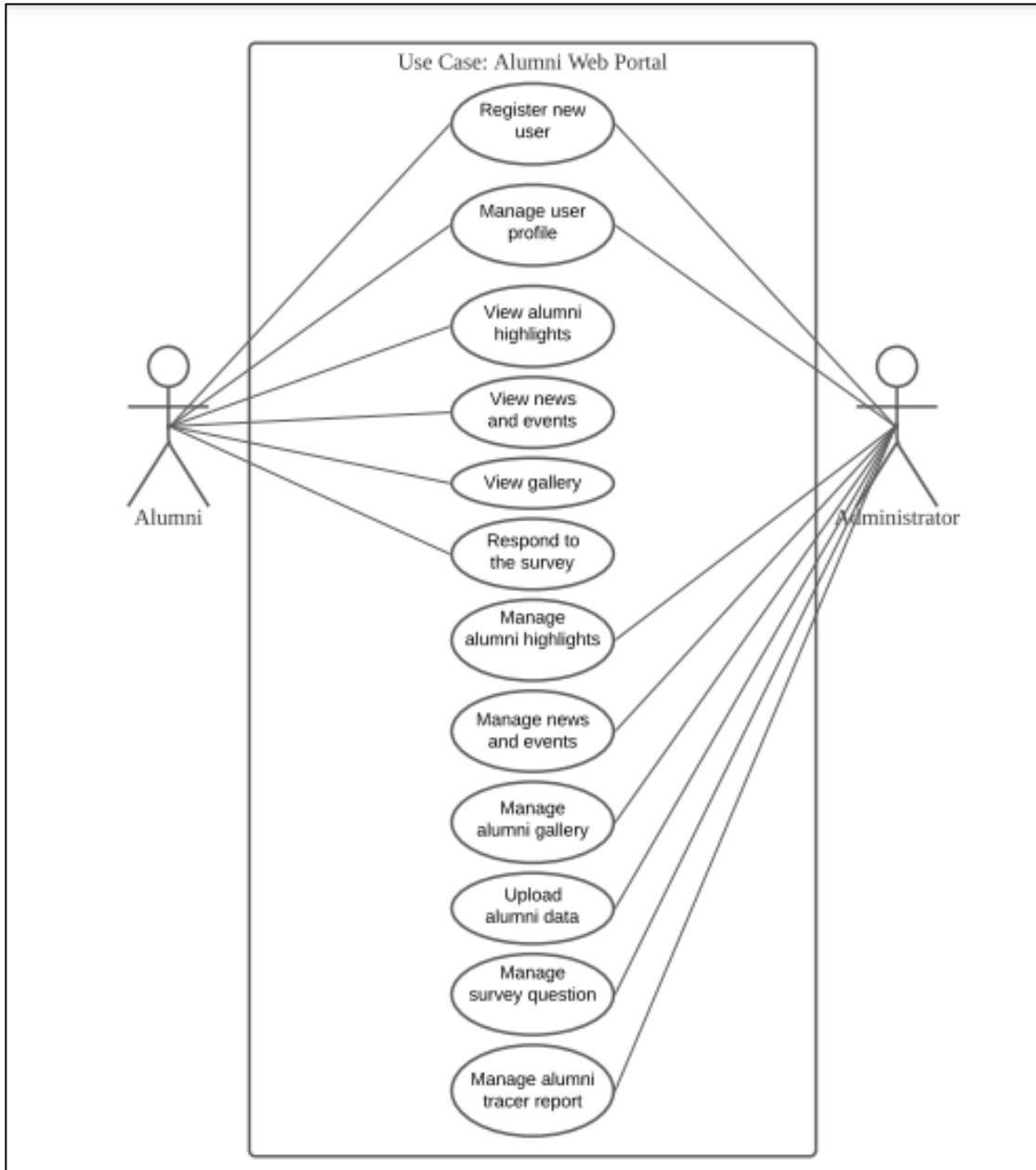
C – Combine	<ul style="list-style-type: none">• To administer alumni data, integrate the Alumni Tracer System with the Alumni Portal.• Hold yearly meetings at the institution in conjunction with scientific activities in order to increase and promote membership.
M – Modify or Magnify or Diminish	<ul style="list-style-type: none">• Modify the training area to a topic of interest; for instance, an event or study distribution will be tailored to the topic of interest rather than the field of study.• Encourage professional chances to be conveyed not just through corporations but also through alumni.• Provide space for the dissemination of research or the development of studies related to the topic of interest.
R – Rearrange or Revert	<ul style="list-style-type: none">• Rather than requesting registration, register all students and alumni and email them their login credentials and password.• Establish a space for personal experiences or articles on issues of interest to be published, and notify others through email when new stories are posted. Hence, checking the site for news does not rely solely on the alumni's initiative.

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Meanwhile, a use case diagram for a proposed system is illustrated as in Figure 1.



Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Figure 1: System use case diagram

The following diagrams illustrate the portal interfaces.

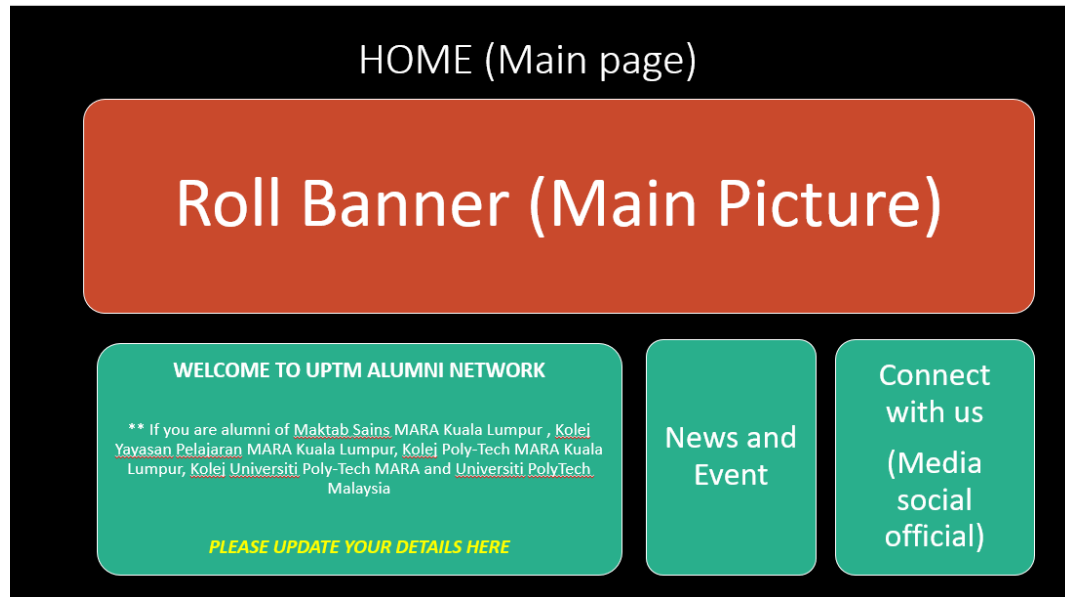
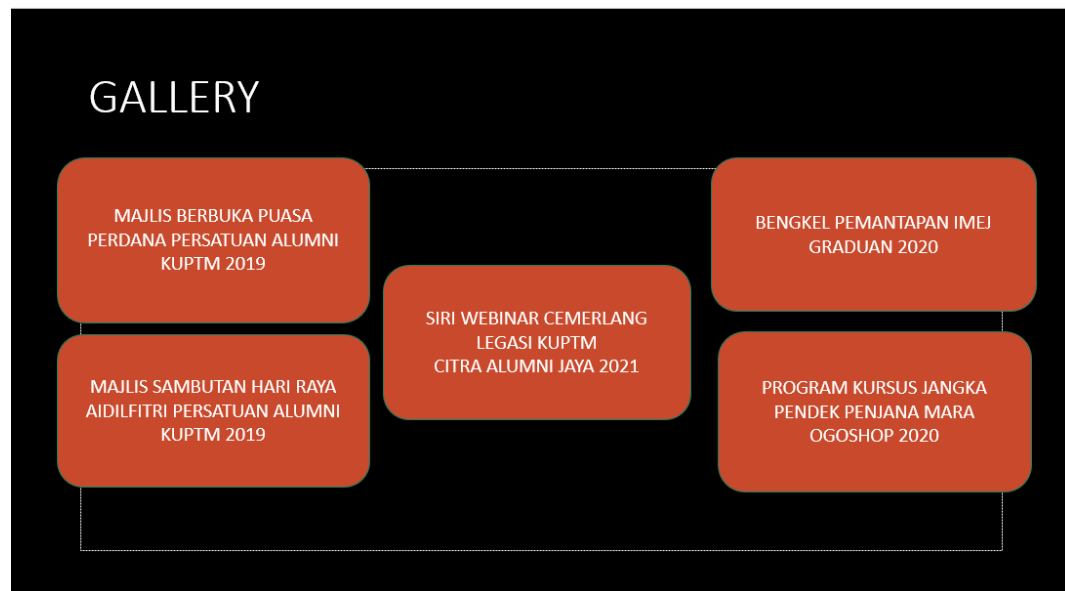


Figure 2: Menu Option



Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Figure 3: Layout of the main menu page

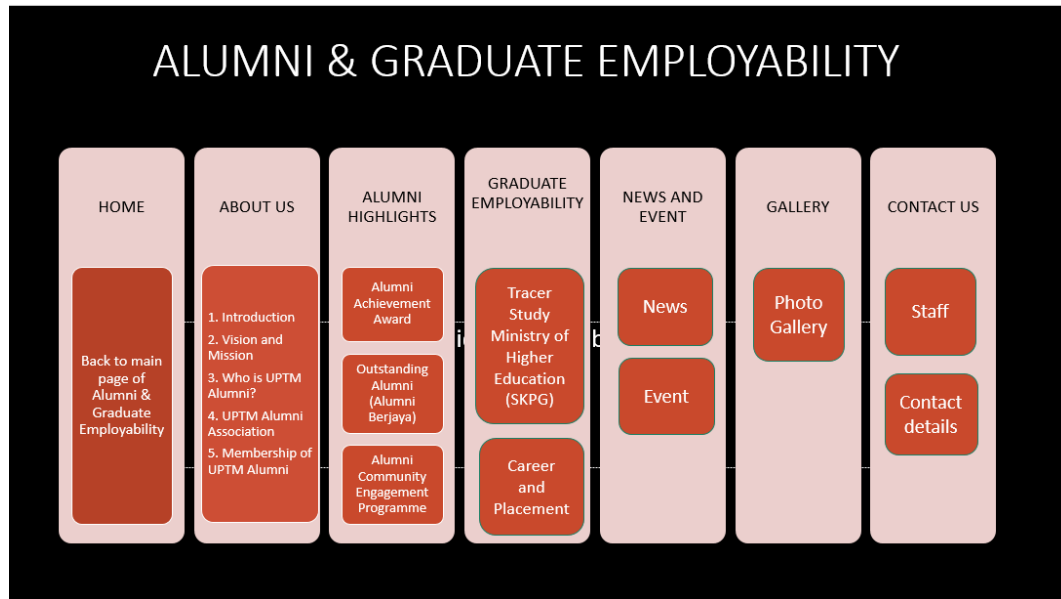


Figure 4: Gallery page content (sample)



Figure 5: Contact us page content

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

5.0 Conclusion

Alumni are undeniably one of the most precious assets of higher education institutions. This is because the university's reputation is reflected in society as a result of its doings. As a result, the more interaction the institution has with its alumni, the more options for feedback and knowledge improvement can be obtained.

An alumni portal promotes research, allows for knowledge exchange, and enables personal, professional, and academic networking. The portal should be developed to encourage alumni to the institution's present activities, which rarely happens once a student has completed their degree and is no longer responsible for being physically active in academic activities. An alumni portal should be user-friendly and engaging in order to help alumni feel more connected to the educational institution. The study's discoveries blend components found at prestigious educational institutions with the needs of the target audience.

The approach described in this study will assist the institution and alumni establish strong bonds by allowing them to share their perspectives, experiences, guidance, strategies, and motivational inputs. It will handle alumni data and give secure ideas and information to both parties with ease. Moreover, the portal would give a single platform for students, alumni, and the institution to communicate, which would promote future alumni engagement activities. It will include interactive elements, including personal chatting messages, active user status, job postings and internships, virtual alumni meetings, industry-sponsored projects, online expert lecture videos, and entrepreneurship coaching. Besides that, the system also provides the management of alumni traces records. The system ensures the accuracy of administrative graduate tracking data is managed systematically and analytically. It will include capabilities to analyze data based on the required parameters.

REFERENCES

- Barnard, Z. (2007). *Online community portals for enhanced alumni networking* [Doctoral thesis]. University of Johannesburg.
- Bonnardel, N., & Zenasni, F. (2010). The impact of technology on creativity in design: An enhancement? *Creativity and Innovation Management*, 19(2), 180–191. <https://doi.org/10.1111/j.1467-8691.2010.00560.x>
- Brant, K. E., & Regan, P. J. (2002). The spectrum of alumni involvement. *Currents*, 28(2), 22–28.
- Cagnazzo, L., Taticchi, P., & Botarelli, M. (2008). A literature review on innovation management tools. *Revista de Administração Da Universidade Federal de Santa Maria*, 1(3), 316–330.
- Chi, H., Jones, E., & Grandham, L. P. (2012). Enhancing mentoring between alumni and students via smart alumni system. *Procedia Computer Science*, 9, 1390–1399. <https://doi.org/10.1016/j.procs.2012.04.153>
- dos Santos Teixeira, G. C., & Maccari, E. A. (2014). Proposition of an alumni portal based on benchmarking and innovative process. *JISTEM-Journal of Information Systems and Technology Management*, 11, 591–610. <https://doi.org/10.4301/S1807-17752014000300005>
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86(3), 513–524. <https://doi.org/10.1037/0021-9010.86.3.513>
- Henriksen, D., Henderson, M., Creely, E., Ceretkova, S., Černočová, M., Sendova, E., Sointu, E. T., & Tienken, C. H. (2018). Creativity and technology in education: An international perspective. *Technology, Knowledge and Learning*, 23(3), 409–424. <https://doi.org/10.1007/s10758-018-9380-1>
- Parmar, R. S., Singh, R., Tripathi, S., Khalkar, R., & Patil, S. (2017). BVDUCOE college alumni portal. *Computer Science Trends and Technology (JCST)*, 5(2), 359–362.
- Stolterman, E., Ågren, P. O., & Croon, A. (1997). *Virtual communities: Why and how are they studied*. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.100.2446&rep=rep1&type=pdf>

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Tidd, J., Bessant, J., & Pavitt, K. (2008). *Gestão da Inovação*. Bookman.

Yalcinalp, S., & Avci, Ü. (2019). Creativity and emerging digital educational technologies: A systematic review. *Turkish Online Journal of Educational Technology - TOJET*, 18(3), 25–45..

Copyright: © 2022 The Author(s)

Published by Kolej Universiti Poly-Tech MARA Kuala Lumpur

This article is published under the Creative Commons Attribute (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>