

## Strengthening Student Employability Through Applicant Tracking System-Based CV Compilation Training

### Penguatan Employability Mahasiswa Melalui Pelatihan Penyusunan CV Berbasis Applicant Tracking System

Hardiansyah<sup>1\*</sup>, Rabiatul Adhawiyah<sup>2</sup>, Dian Dwi NurRahmah<sup>3</sup>  
Edoardo Tondang<sup>4</sup>, Diana<sup>5</sup>

<sup>1-4</sup>Department Psychology, Universitas Mulawarman

<sup>5</sup>Department Administration Public, Universitas 17 Agustus 1945 Samarinda

email correspondence: [hardiansyah@fisip.unmul.ac.id](mailto:hardiansyah@fisip.unmul.ac.id)

#### Abstract:

Increasingly competitive job markets require students to possess strong work skills, including the ability to prepare an Applicant Tracking System (ATS)-based CV. However, some students still lack a grasp of CV standards that align with modern recruitment systems. This community service activity aims to improve students' work skills through ATS-based CV preparation training. The method used was an interactive workshop for 32 fourth- and sixth-semester psychology students, covering employment topics, ATS concepts, CV preparation practices, and mentoring. Evaluation was conducted through pre- and post-tests using an employment scale and an ATS CV knowledge questionnaire. Results showed a 55.17% increase in work skills (from 58 to 90) and a 56.67% increase in CV preparation knowledge and skills (from 60 to 94). These findings demonstrate that practice-based training is effective in improving students' work readiness and is relevant to today's digital recruitment needs.

**Keywords:** ATS CV; employability; students

#### Abstrak

Persaingan kerja yang semakin sulit menuntut mahasiswa memiliki employability yang baik, termasuk kemampuan menyusun CV berbasis Applicant Tracking System (ATS). Namun, sebagian mahasiswa masih belum memahami standar CV yang sesuai dengan sistem rekrutmen modern. Kegiatan pengabdian ini bertujuan untuk meningkatkan employability mahasiswa melalui pelatihan penyusunan CV berbasis ATS. Metode yang digunakan adalah workshop interaktif kepada 32 mahasiswa psikologi semester 4 dan 6, yang mencakup materi employability, konsep ATS, praktik penyusunan CV, serta pendampingan. Evaluasi dilakukan melalui pre-test dan post-test menggunakan skala employability dan kuesioner pengetahuan CV ATS. Hasil menunjukkan peningkatan employability sebesar 55,17% (skor 58 menjadi 90) dan peningkatan pengetahuan serta keterampilan penyusunan CV sebesar 56,67% (skor 60 menjadi 94). Temuan ini menunjukkan bahwa pelatihan berbasis praktik efektif dalam meningkatkan kesiapan kerja mahasiswa dan relevan dengan kebutuhan rekrutmen digital saat ini.

**Kata Kunci:** CV ATS; employability; mahasiswa

Submitted: 15/01/2026

Revision: 16/04/2026

Accepted: 19/05/2026



## INTRODUCTION

In the digital era and the disruption of Industry 4.0, competition in the job market is increasingly fierce, especially for college graduates. One of the main challenges faced is the low level of employability skills, particularly in the ability to present oneself through effective job application documents. Currently, many companies have adopted Applicant Tracking System (ATS) technology to automatically screen candidates based on certain criteria, so CV that do not meet ATS standards are potentially eliminated before being read by recruiters (Chavan et al., 2024; Chapman & Webster, 2003; Greeshma & Kumar, 2025). This condition indicates that students are required not only to have academic competence, but also technical skills in creating relevant, structured, and ATS-friendly CVs to compete in the job market.

Based on the results of initial observations of students as partners, several main problems were found, namely: a low understanding of the concept of employability and the importance of personal branding; the still dominant use of conventional CVs that do not meet ATS standards; a lack of understanding of the use of keywords, formats, and structures of digital-based CVs; limited access to practical training based on industry needs; and minimal assistance in compiling CVs professionally. These conditions cause students to be less than optimal in participating in the technology-based recruitment process. Therefore, an intervention is needed through community service activities in the form of ATS-based CV preparation training to improve students' work readiness.

The concept of employability has become a major concern in modern higher education. Employability can be defined as a combination of skills, understanding, and personal attributes that make individuals more likely to obtain employment and succeed in their careers (Brown, 2022; Hassouna et al., 2024; Rothwell et al., 2025). Similarly, self-presentation skills, including through CVs and the job selection process, are a crucial component of student employability (Clarke, 2018). This demonstrates that CV preparation is not merely administrative but also represents individual competencies that determine job opportunities. CV ATS are already used by most companies to assess the profile and experience of prospective candidates, making them relevant to the concept of improving student employability.

Furthermore, technological developments in recruitment demand more specific adaptations. The majority of organizations have adopted Applicant Tracking Systems (ATS) as initial candidate screening tools, which utilize keyword matching and specific document formats (Hassouna et al., 2024; Surahio et al., 2025). Other research also shows that using ATS-based CVs can significantly increase the chances of passing the initial selection process compared to conventional CVs (Bevara et al., 2025). Therefore, students need to be equipped with the technical skills to create CVs compatible with these systems.

From a policy perspective, the Indonesian government, through the Merdeka Belajar-Kampus Merdeka (MBKM) program, emphasizes the importance of improving the work readiness of university graduates by strengthening soft skills and hard skills relevant to industry needs (Ministry of Education and Culture, 2020). Furthermore, the National Standards for Higher Education (SN-Dikti) also mandate that graduates must possess work competencies, including communication skills and readiness to face the world of work. Therefore, ATS-based CV development training aligns with national policy directions to enhance graduate competitiveness.

Based on the identified problems, the solutions offered in this community service activity include: (1) training in employability and personal branding concepts; (2) a workshop on ATS-based CV development, covering structure, format, and keyword optimization; (3) hands-on CV development practice for participants; (4) mentoring and feedback on participants' CVs; and (5) an introduction to various digital tools that support the creation of professional ATS-based CVs. This approach is expected to provide a learning experience that is applicable and aligned with the needs of the workplace.

The goal of this community service activity is to improve student employability by strengthening skills in developing Applicant Tracking System (ATS)-based CVs. Specifically, this activity aims to enhance students' understanding of the digital recruitment process, develop technical skills in creating effective and competitive CVs, and better prepare them for the dynamic, technology-driven workplace.

### IMPLEMENTATION METHOD

This community service activity took the form of an Applicant Tracking System (ATS)-based CV development workshop for students of the Psychology Study Program at Mulawarman University. This activity was designed as an educational and practical intervention to improve student employability through understanding and technical skills in developing CVs that meet digital recruitment standards. The workshop was conducted interactively, combining lectures, discussions, hands-on practice, and intensive mentoring.

The participants were 32 fourth and sixth-semester Psychology Study Program students at Mulawarman University. These students were selected because they were in the preparation phase for entering the workforce or internship programs, thus requiring early reinforcement of their employability skills. In general, the partner profile indicated that most students still had limited understanding of the concept of a professional ATS-based CV and lacked experience in developing job application documents that align with industry requirements.

The implementation of the activity was divided into three main stages: pre-activity, activity implementation, and monitoring and evaluation. During the pre-activity stage, partner needs were analyzed through observation and distribution of an initial questionnaire (pre-test), training materials were developed, implementation team coordination was conducted, and facilities and infrastructure were prepared. This stage aims to ensure the workshop is ready to meet the needs of the participants.

The implementation stage of the activity is conducted as a workshop with several structured main sessions, as shown in the following table:

**Table 1. Implementation of Activities**

<b>Waktu</b>	<b>Materi</b>
Session 1	Introduction to Employability and Personal Branding
Session 2	Concept and Function of an Applicant Tracking System (ATS)
Session 3	ATS-Based CV Writing Techniques (Format & Keywords)
Session 4	CV Writing Practice
Session 5	Review and Feedback on Participant CVs

## RESULT

The Results and Discussion must contain the following points in sequence:

### 1. Pre-Activity Stage

In this pre-activity stage, the community service team conducted a needs analysis by distributing an initial questionnaire (pre-test) to 32 participating students. Initial results indicated that most students did not yet understand the concept of the Applicant Tracking System (ATS), including the structure and use of keywords in CV writing. Furthermore, the author conducted internal coordination, developed training modules, and prepared technical preparations for the workshop. This stage is crucial to ensure that the activities truly meet the needs of the participants, ensuring that the interventions are more targeted and effective.

### 2. Implementation Stage of the ATS-Based CV

The workshop was conducted as an interactive workshop consisting of five main sessions: (1) an introduction to employability and personal branding; (2) the concept and function of ATS; (3) ATS-based CV writing techniques; (4) CV writing practice; and (5) review and feedback on participants' CVs. During the presentation session, participants demonstrated high enthusiasm, as evidenced by the active discussion and questions regarding keyword usage and industry-standard CV formats. Figure 1 illustrates the presentation activities by the resource person to the participants.



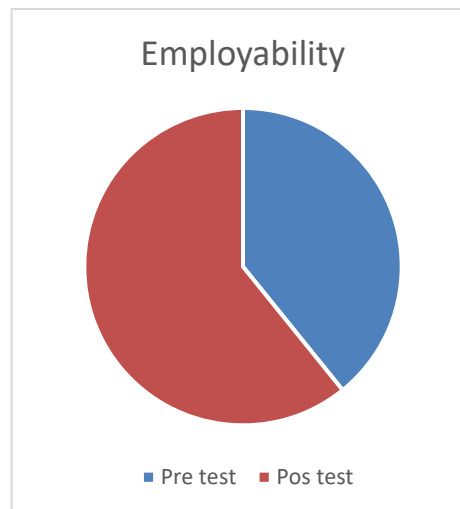
**Figure 1. Delivery of Material**

Next, in the practical session, participants were asked to compile their own CVs, assisted by a facilitator. This assistance allowed participants to directly apply the knowledge they had acquired.

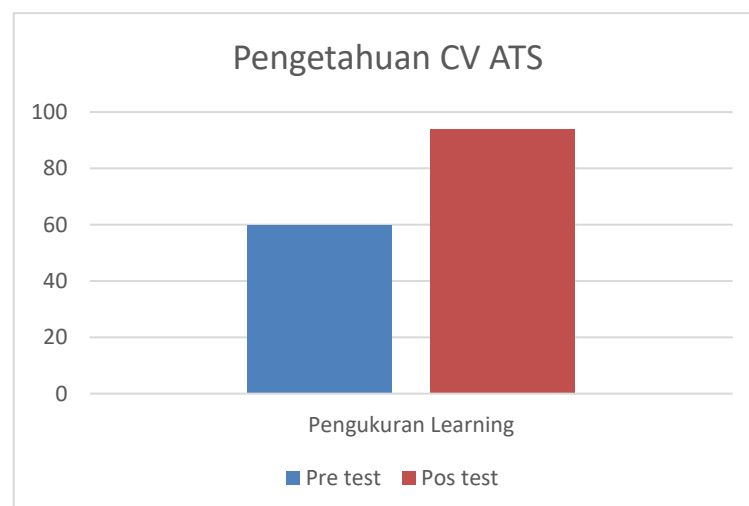
### 3. Monitoring dan Evaluation

Activity monitoring was conducted through direct observation during the workshop, covering the level of participation, active engagement, and participants' ability to complete practical tasks. Overall, participants demonstrated a high level of participation, particularly during the practical and discussion sessions.

The evaluation used two instruments: an employability scale and an ATS-based CV knowledge questionnaire. The results are as follows:



**Figure 2. Result Pre and Post Test Measurement Employability**



**Figure 3. Result Pre and Post Test Learning CV ATS**

The evaluation results showed significant improvement. The average student employability score increased from 58 in the pre-test to 90 in the post-test, representing a 55.17% increase. Meanwhile, the knowledge evaluation results showed an increase from an average score of 60 in the pre-test to 94 in the post-test, representing a 56.67% increase.

These results indicate that the workshop was effective in improving students' understanding and job readiness, particularly in developing ATS-based CVs that are relevant to current job market needs.

**4. Obstacles Encountered**

Several obstacles were encountered during the implementation of the activity, including: (1) differences in participants' initial level of understanding regarding ATS technology; (2) limited time to provide individual mentoring; and (3) variations in the devices (laptops/software) used by participants, which impacted the practical process.

To address these obstacles, the community service team provided solutions in the form of: (1) simplifying the material with a step-by-step approach and concrete examples; (2) dividing the participants into small groups to maximize mentoring; and (3) providing ATS-based CV templates that participants could use directly. Going forward, it is recommended that similar activities be conducted over a longer period of time and supplemented with follow-up mentoring sessions (coaching clinics) to achieve optimal results.

## DISCUSSION

The results of the community service activities showed a significant increase in the employability and knowledge aspects of students in compiling CVs based on the Applicant Tracking System (ATS). This increase reflects those interventions in the form of structured training are able to address the gap between academic competencies and the needs of the workplace (Marlita et al., 2024; Suningsih et al., 2024; Velankar & Khuspure, 2025). Conceptually, it includes not only technical abilities but also skills in communicating competencies effectively to employers (Ho et al., 2023; Pennington & Stanford, 2019; Sin & Amaral, 2017). Thus, the increase in employability scores from 58 to 90 indicates that students not only acquired technical skills in compiling CVs based on the ATS but also experienced strengthening in the aspect of psychological readiness. The psychological readiness in question includes several dimensions, namely increased self-confidence in presenting one's competencies through CVs (Sudarsono et al., 2022); career (Rotich, 2022), namely an individual's confidence in their ability to succeed in the job search and selection process; clarity of career goals (Ahmad & Latif, 2025; Hirschi et al., 2014), namely increased clarity of the desired career direction so that students are able to tailor the contents of their CVs to the positions they are applying for; and reduced anxiety towards the recruitment process, where students are better prepared and less anxious in facing ATS-based administrative selection. In addition, students also showed improvements in self-reflection and personal branding skills, which play an important role in showcasing their uniqueness and competitive value to recruiters. Thus, this training not only strengthens cognitive aspects and technical skills, but also affective aspects and students' mental readiness to enter the world of work.

Furthermore, these results also support the view of Ergün & Şeşen (2021), who stated that employability is influenced by a combination of individual attributes, learning experiences, and social context. In this activity, students are not only provided with theoretical knowledge but also with hands-on experience in compiling a CV that meets industry standards. This process creates contextual learning that enables students to understand the relevance of the material studied to real-world needs. This explains why the improvement is quite significant, as the learning is applicative and experience-based. From a learning perspective, the effectiveness of this activity can be explained through constructivism theory, which states that knowledge is actively constructed by individuals through experience and interaction (Alifah & Hardjati, 2025; Fuady & Tundo, 2025). In this workshop, students are directly involved in CV writing practices, discussions, and receive feedback from the facilitator. This interaction enables a meaning-making process, where students not only memorize concepts but also understand how to apply them in real-world contexts. Therefore, the increase in knowledge scores from 60 to 92 indicates that the active learning approach is more effective than the conventional approach.

Furthermore, the success of this activity is also related to human capital theory, which states that investing in individual skill development will increase productivity and employment opportunities (Fais et al., 2024; Green et al., 2017). ATS-based CV training can be viewed as an investment in developing students' human capital, particularly in job search skills. By developing the ability to compile a CV that meets ATS standards, students have a greater chance of passing the initial selection stage, thereby increasing their competitiveness in the job market.

In terms of technological developments, the findings of this activity are relevant to the increasingly automated nature of modern recruitment systems. The use of ATS in the selection process requires applicants to adapt their application documents to algorithm-based systems (Alifah & Hardjati, 2025; Bevara et al., 2025; Chavan et al., 2024; Chapman & Webster, 2003). This means that job success is determined not only by the content of their CVs, but also by how they are processed by digital systems. Therefore, this training is crucial for students' adaptation to the digital transformation of the workplace.

Furthermore, the results of this activity also demonstrate that a practice-based approach and mentoring have a more significant impact than simply providing material. This aligns with the experiential concept, which emphasizes that effective learning occurs through a cycle of concrete experience, reflection, conceptualization, and active experimentation. In this workshop, students experienced all these stages, from understanding concepts, attempting to develop CVs, receiving feedback, and improving their work. This cycle reinforces the deeper internalization of knowledge and skills.

Furthermore, the improvements demonstrated the importance of integrating hard and soft skills in developing employability. ATS-based CV development involves not only technical skills but also analytical, communication, and personal branding skills. This supports the view that employability is a multidimensional construct involving various integrated competencies (Tran et al., 2024). Therefore, this activity not only improves one skill aspect but also has a holistic impact on students' work readiness.

The results of this activity have important theoretical and practical implications. Theoretically, these findings reinforce the concept of employability as a construct that can be enhanced through experiential and technology-based training interventions. Practically, this activity demonstrates that ATS-based CV development training can be an effective skills development model in preparing students for the digital workplace. Therefore, universities are advised to integrate similar training into their curriculum or student career development programs. Furthermore, this activity can also serve as a foundation for the development of follow-up programs such as career coaching, job interview simulations, and more comprehensive personal branding training to sustainably enhance graduate competitiveness.

### **CONCLUSION AND SUGGESTION**

A community service activity through a CV development workshop based on the Applicant Tracking System (ATS) has successfully achieved its stated goal of improving the employability of psychology students at Universitas Mulawarman. The results showed significant improvements in both soft and hard skills. This improvement demonstrates the effectiveness of practice-based training and mentoring in helping students understand and apply CV development to meet digital recruitment needs, thereby strengthening their competitiveness in the workforce.

Based on the results of this activity, recommendations include the need to develop more comprehensive follow-up programs, such as career coaching or career clinics that provide ongoing support for students in preparing for the job selection process. Furthermore, similar activities could be expanded to other areas, such as job interview simulation training, digital personal branding development (LinkedIn optimization), and recruitment technology literacy training. For scientific advancement, further research is recommended to test the effectiveness of ATS-based interventions on broader outcomes, such as job success or long-term work readiness. This contribution can further strengthen the development of technology-based employability improvement models.

### ACKNOWLEDGMENTS

The authors express their deepest gratitude to the Faculty of Social and Political Sciences of Universitas Mulawarman University, which has helped facilitate the room, and to the Faculty of Social and Political Sciences of Universitas 17 Agustus 1945 Samarinda, which has contributed by recommending one of the lecturers to serve on the organizing committee for this activity.

### REFERENCE

- Ahmad, B., & Latif, S. (2025). The path to decent work: exploring career identity, career self-efficacy, and organizational career support in the face of ostracism. *International Journal for Educational and Vocational Guidance*. <https://doi.org/10.1007/s10775-025-09757-z>
- Alifah, D. A. N., & Hardjati, S. (2025). Pelatihan Pembuatan Curriculum Vitae Menggunakan Kinobi CV sebagai Pengembangan Keterampilan Profesional Siswa MA As-Shofa Jubung. *Jurnal Pengabdian Masyarakat Dan Riset Pendidikan*, 4(2), 10648–10658. <https://doi.org/10.31004/jerkin.v4i2.3486>
- Bevara, R. V. K., Mannuru, N. R., Karedla, S. P., Lund, B., Xiao, T., Pasem, H., Dronavalli, S. C., & Rupeshkumar, S. (2025). Resume2Vec: Transforming Applicant Tracking Systems with Intelligent Resume Embeddings for Precise Candidate Matching. *Electronics (Switzerland)*, 14(4), 1–18. <https://doi.org/10.3390/electronics14040794>
- Brown, P. (2022). Re-imagining employability: An ontology of employability best practice in higher education institutions. *Journal of Education and Work*, 4(35), 367–386.
- Chavan, P. R., Chandurkar, Y., Tidake, A., Lavankar, G., Gaikwad, S., & Chavan, R. (2024). Enhancing recruitment efficiency: An advanced Applicant Tracking System (ATS). *Industrial Management Advances*, 2(1), 1–9. <https://doi.org/10.59429/ima.v2i1.6373>
- Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes, and context. *Studies in Higher Education*, 11(43), 1923–1937.
- Chapman, D. S., & Webster, J. (2003). The Use of Technologies in the Recruiting, Screening, and Selection Processes for Job Candidates. *International Journal of Selection and Assessment*, 11(2), 113–120. <https://doi.org/10.1111/1468-2389.00234>
- Ergün, M., & Şeşen, H. (2021). A Comprehensive Study on University Students' Perceived Employability: Comparative Effects of Personal and Contextual Factors. *SAGE Open*, 11(3). <https://doi.org/10.1177/21582440211036105>
- Fais, M. A., Kunhadi, D., Sutejo, B., Yuniati, Y., Febihapsari, M., Rasmito, A., Mohamad, S., & Shodiq, D. (2024). Dedikasi: Jurnal Pengabdian kepada Masyarakat Pelatihan

- Profesionalisme Fresh Graduate dalam membuat CV Berbasis ATS. *Jurnal Dedikasi*, 4(2), 76–84.
- Fuady, M. S., & Tundo. (2025). Optimalisasi Teknologi N8N dalam Pengembangan Aplikasi Penilaian CV ATS-COMPLIANT untuk Evaluasi Kelayakan Siswa SMK. *Jurnal Tekno Kompak*, 19(2), 142–154. <https://doi.org/10.33365/jtk.v19i2.72>
- Green et al., A. (2017). Employer perceptions of graduate employability. *Journal of Education and Work*, 3(30), 213–231.
- Greeshma, M., & Kumar, S. (2025). Effectiveness of applicant tracking systems in recruitment and selection. *International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)*, 7(6), 4199–4201.
- Hassouna, M. M., Zeinab, ., & Zaazou, A. (2024). The Impact of Undergraduate Internships on Employability-An Empirical Study. *The Academic Journal of Contemporary Commercial Research*, 4(3), 24–47.
- Hirschi et al., A. (2014). Career adaptability and career engagement. *Journal of Vocational Behavior*, 1(85), 83–92.
- Ho, T. T. H., Le, V. H., Nguyen, D. T., Nguyen, C. T. P., & Nguyen, H. T. T. (2023). Effects of career development learning on students' perceived employability: a longitudinal study. *Higher Education*, 86(2), 297–315. <https://doi.org/10.1007/s10734-022-00933-6>
- Marlita, D., Handayani, S., Perwitasari, E. P., Azis, M. R., & Hamonangan, Y. (2024). Socialization Applicant Tracking System (ATS) and ATS Curriculum Vitae for ITL Trisakti and General Students. *Asian Journal of Community Services*, 3(2), 287–294. <https://doi.org/10.55927/ajcs.v3i2.8080>
- Pennington, D., & Stanford, S. (2019). Employability Skills: Strategies for Enhancing Graduate Employability. *Journal of Higher Education*, 67(3), 102–115.
- Rothwell, A., Mamcarz, P., Parra, A., Sánchez-Queija, M. I., Rosa, A. De, & Presti, A. Lo. (2025). Employability: An Umbrella Review. *Australian Journal of Career Development*, 34(3), 236–248. <https://doi.org/10.1177/10384162251366428>
- Rotich, R. K. (2022). Self-efficacy, demographic characteristics and organizational citizenship behavior among management employees in public organizations in Kenya. *European Journal of Business and Strategic Management*, 7(3), 1–23. <https://doi.org/10.47604/ejbsm.1710>
- Sin, C., & Amaral, A. (2017). Academics' and employers' perceptions of graduate employability: A study across 13 European countries. *Higher Education*, 5(73), 703–718.
- Sudarsono, B., Tentama, F., & Ghozali, F. A. (2022). Employability Analysis of Students in Yogyakarta: Confirmatory Factor Analysis. *Jurnal Pendidikan*, 14(2), 1451–1462. <https://doi.org/10.35445/alishlah.v14i1.1782>
- Suningsih, S., Ayuni Putri, L., Hendrawaty, E., Komalasari, A., Sarumpaet, S., & Waziana, W. (2024). Pelatihan Pembuatan Curriculum Vitae dalam Bahasa Inggris yang Berbasis Application Tracking System. *Jurnal Nusantara Mengabdi*, 3(2), 85–93. <https://doi.org/10.35912/jnm.v3i2.2979>
- Surahio, K. S., Rashdi, P. T., & Nadeem, R. (2025). A review of technology in recruitment: Quality and efficiency. *Journal Of Applied Linguistics and Tesol*, 8(1), 1263–1269. <https://jalt.com.pk/index.php/jalt/article/view/468/370>
- Tran, L. T., Ngo, N. T. H., Nguyen, H. T. M., Le, T. T. T., & Ho, T. T. H. (2024). “Employability in context”: graduate employability attributes expected by employers in regional Vietnam

and implications for career guidance. *International Journal for Educational and Vocational Guidance*, 24(2), 375–395. <https://doi.org/10.1007/s10775-022-09560-0>

Velankar, M., & Khuspure, P. (2025). A Study of Applicant Tracking System (ATS) In Minimizing Human Intervention in Recruitment. *International Journal of Innovative Research in Engineering and Management*, 12(6), 98–101. <https://doi.org/10.55524/ijirem.2025.12.6.17>