

Evaluating the Usability of a Career Readiness Score (CRS) for Supporting Student Internship Preparedness

Penilaian Kebolegunaan Skor Kesiediaan Kerjaya (CRS) dalam Menyokong Kesiapsiagaan Pelajar bagi Penempatan Latihan Industri

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ABSTRACT

The aim of this study is to evaluate the usability of the Career Readiness Score (CRS) feature in supporting student preparedness for internship placement within an Industrial Training Company Information and Ranking System. The CRS provides students with personalized feedback and recommended companies, allowing them to identify areas for improvement, track their progress, and gain confidence in applying for internships. A usability study was conducted with 30 student participants to assess the system's effectiveness and user experience. The study employed System Usability Scale (SUS) to evaluate how well the CRS supports students in self-directed preparation and readiness for internship placement. The results indicate positive usability outcomes. Students perceive the CRS feature as user-friendly and easy to understand, which enhances their ability to assess their readiness for internship placement. These findings indicate the potential of the CRS as a practical and supportive tool for improving students' preparation and decision-making during the internship placement selection process. In conclusion, integrating the CRS feature into the Industrial Training Company Information and Ranking System can support student career development, enhance preparedness for internship placement, and provide structured guidance for placement decisions, offering a framework for future improvements and wider application in career readiness systems.

Keywords: Career Readiness Score; Internship Preparedness; Student Self-Assessment; Usability Study; Industrial Training

ABSTRAK

Kajian ini bertujuan untuk menilai kebolegunaan bagi ciri Skor Kesiediaan Kerjaya (CRS) dalam menyokong kesiapsiagaan pelajar bagi penempatan latihan industri dalam Sistem Maklumat dan Penarafan Syarikat Latihan Industri. Ciri CRS menyediakan maklum balas berperingkat secara peribadi serta cadangan syarikat kepada pelajar, sekali gus membolehkan mereka mengenal pasti aspek penambahbaikan, menjejak perkembangan, dan meningkatkan keyakinan dalam memohon latihan industri. Satu kajian kebolegunaan telah dijalankan melibatkan 30 orang pelajar sebagai peserta bagi menilai keberkesanan sistem serta pengalaman pengguna. Kajian ini menggunakan instrumen System Usability Scale (SUS) untuk menilai sejauh mana ciri CRS menyokong persediaan sendiri dan tahap kesiapsiagaan pelajar terhadap penempatan latihan industri. Hasil kajian menunjukkan tahap kebolegunaan yang positif. Pelajar mendapati ciri Skor Kesiediaan Kerjaya (CRS) mudah digunakan dan mudah difahami, sekali gus meningkatkan keupayaan mereka untuk menilai tahap kesiediaan bagi penempatan latihan industri. Dapatan ini menunjukkan potensi CRS sebagai alat yang praktikal dan menyokong dalam meningkatkan persediaan serta proses membuat keputusan pelajar semasa pemilihan penempatan latihan industri. Kesimpulannya, pengintegrasian ciri CRS dalam Sistem Maklumat dan Penarafan Syarikat Latihan Industri berupaya menyokong pembangunan kerjaya pelajar, meningkatkan tahap kesiapsiagaan untuk penempatan latihan industri, serta menyediakan panduan yang berstruktur dalam membuat keputusan penempatan, sekali gus menawarkan satu rangka kerja untuk penambahbaikan pada masa hadapan dan aplikasi yang lebih meluas dalam sistem kesiapsiagaan kerjaya.

Kata kunci: Skor Kesiediaan Kerjaya; Kesiapsiagaan Latihan Industri; Penilaian Kendiri Pelajar; Kajian Kebolegunaan; Latihan Industri

INTRODUCTION

Industrial training or internship placement is a compulsory component in many higher education programs, providing students with hands-on experience as they transition from education to employment. This practical exposure helps students address the common challenge of “no experience, no job; no job, no experience” (Oswald-Egg & Renold, 2021, as cited in Kwan et al., 2025) while developing essential skills needed for the workplace. Through such training, students are expected to apply theoretical knowledge, develop professional competencies, and gain industry-relevant experience prior to graduation. As such, successful internship placement plays a crucial role in preparing students for future careers.

Despite its importance, many students face challenges in preparing for internship placement. Students often lack awareness of their own readiness level, including their technical skills, soft skills, and extracurricular experiences. As a result, internship applications are frequently made without clear guidance, leading to mismatches between students and companies. Existing internship management systems typically focus on company listings and application processes, offering limited support in helping students assess their preparedness or identify areas for improvement.

Furthermore, the absence of structured self-assessment mechanisms makes it difficult for students to evaluate their strengths and weaknesses before applying for internship placements. Recruiters are increasingly seeking employees with strong soft skills, which are often considered more important than GPA. These skills include self-awareness, respect for others, leadership, a positive attitude, teamwork, self-confidence, critical thinking, and effective communication. Professionals are required to both master technical skills and demonstrate these essential interpersonal and cognitive competencies (Dixon et al., 2010, as cited in Azhenov et al., 2023). Without measurable indicators of career readiness, students preparing themselves for the professional world may rely heavily on assumptions or external advice, which may not accurately reflect their actual preparedness. This highlights the need for a systematic approach that supports students in self-directed preparation and informed decision-making.

To address this gap, this study proposes the integration of a Career Readiness Score (CRS) feature within an Industrial Training Company Information and Ranking System. The CRS provides students with a quantitative measure of their readiness based on selected criteria, along with personalized feedback and recommended companies. By offering structured guidance and continuous progress tracking, the CRS aims to support students in improving their preparedness for internship placement.

The aim of this study is to evaluate the usability and perceived usefulness of the CRS feature in supporting student preparedness for internship placement through a preliminary usability study involving undergraduate students. The System Usability Scale (SUS) was employed to assess students' perceptions of the CRS feature in terms of ease of use, clarity, and overall acceptance. The findings of this study contribute to the development of career readiness systems that support student preparation and informed internship placement decisions.

This article is organized into six main sections. Section 1 introduces the background of the study and the significance of career readiness in supporting student internship placement. Section 2 presents the problem statement, outlining the challenges students face in assessing their preparedness and selecting suitable internship placements. Section 3 reviews existing research on career readiness and Career Readiness Score (CRS) approaches, focusing on methods used to assess student preparedness for internship placement and highlighting research gaps addressed by the proposed CRS. Section 4 describes the methodology of the study. It covers the materials of the Career Readiness Score (CRS), the system development of the CRS module, and the evaluation and experimental design used to assess the system's usability. Section 5 presents the findings and discussion, analyzing the usability and perceived usefulness of the CRS feature. Finally, Section 6 concludes the article by summarizing the key findings, discussing the limitations of the study, and suggesting directions for future work.

PROBLEM STATEMENT

Many students approach internship placement without a clear and measurable understanding of their career readiness. Although internship opportunities are widely available, students often lack structured mechanisms to evaluate their preparedness in terms of skills, experience, and employability-related competencies. This uncertainty limits students' ability to prepare strategically for internship placement and may result in applications that do not align with their actual readiness level.

In the absence of standardized career readiness indicators, students frequently rely on academic performance or informal self-judgement to assess their preparedness. However, conventional academic metrics do not adequately capture practical skills, soft skills, or experiential learning outcomes that are critical for internship success. Without clear feedback or benchmarks, students face difficulties in identifying specific areas for improvement, reducing the effectiveness of self-directed preparation for internship placement.

Furthermore, existing internship support systems primarily focus on company listings and application processes, providing limited integration between student readiness assessment and internship selection. The lack of a structured approach that links career readiness evaluation with internship recommendations highlights the need for a measurable and systematic solution. A Career Readiness Score (CRS) offers a structured framework to quantify student preparedness, provide actionable feedback, and support informed internship placement decisions, thereby helping students understand their readiness for industrial training.

LITERATURE REVIEW

Career Readiness

Career readiness refers to the level of achievement required for students to be prepared for success in the employment market (Deif et al., 2017). It encompasses an individual's understanding of industry requirements, possession of relevant skills, and ability to adapt to changes within the work environment (Rachmawati et al., 2024). Research indicates that factors such as self-efficacy or self-confidence influence career readiness, shaping students' engagement in preparation activities and their persistence in overcoming challenges (Rachmawati et al., 2024). These insights emphasize the importance of structured mechanisms to support students in evaluating and developing their career readiness prior to entering industrial training or internship programs.

Despite the recognized importance of career readiness, many students face challenges in assessing their preparedness. Traditional academic metrics, such as GPA, do not fully capture practical skills, soft skills, or experiential learning outcomes that are critical for internship success. As a result, students often lack clarity about their strengths and areas requiring improvement, which limits their ability to engage in targeted preparation activities and make informed decisions regarding suitable internship placements.

Career Readiness Score (CRS)

To address the limitations in assessing career readiness, the integration of measurable scoring mechanisms has been proposed. Career Readiness Score (CRS) offers a structured framework to quantify students' preparedness, providing actionable feedback that can guide self-directed development and inform internship selection. Although the inclusion of CRS has not been widely implemented in existing systems, it has the potential to support students in aligning their readiness with the requirements of prospective internship companies.

Deif et al. (2017b) identified key performance attributes that can form the basis of career readiness assessment, including *Knowledge*, *Engagement*, and *Learn by Doing*. These attributes were derived from collaborative research involving faculty, students, and industry stakeholders and represent the competencies most valued by employers. By incorporating such attributes, a CRS feature allows students to self-assess their performance, gain insight into areas needing improvement, and strategically prepare for industrial training. Despite its potential, limited studies have examined the integration of career readiness scoring within internship placement systems, highlighting the need for further research and practical implementation.

METHODOLOGY

A. Material

Career Readiness Score Module

The Career Readiness Score module was developed to assess students' employability readiness based on key competencies. Students complete a structured Career Readiness Self-Assessment, developed with reference to established frameworks from California State University, Long Beach (CSULB) and the National Association of Colleges and Employers (NACE). Upon completion, the system automatically calculates a CRS and provides a personalized summary of results. Each student is assigned a CRS level based on their total score, reflecting their current career readiness. In addition, the system generates company recommendations aligned with the student's CRS level, enabling them to focus on internship opportunities that match their skills and development stage. Students can retake the assessment periodically to track improvements in their career readiness over time.

Career Readiness Assessment

The Career Readiness Assessment subsection covers the Career Readiness Score (CRS) module, which is designed to evaluate students' preparedness for internship placement. The CRS calculation is based on eight core competencies defined by the National Association of Colleges and Employers Career Readiness Competencies (NACE Career Readiness Competencies, 2021). Each competency is represented as a separate section in the assessment, and each section contains five questions. Students respond to each question using a five-point Likert scale, where 1 indicates a low level of ability and 5 indicates a high level of ability. To ensure a structured evaluation, students are required to complete all questions within a section before progressing to the next competency. The scores from all eight competencies are aggregated to calculate the overall Career Readiness Score, which ranges from a minimum of 20 to a maximum of 100. Based on the total score, students are assigned to one of five readiness levels: 20 – *Growing*, 21–40 – *Emerging*, 41–60 – *Aspiring*, 61–80 – *Achieving*, and 81–100 – *Thriving*. This structured scoring system provides students with a clear indication of their strengths and areas for improvement, supporting personalized feedback and self-directed preparation for internship placement.

Company Recommendations Based on CRS Level

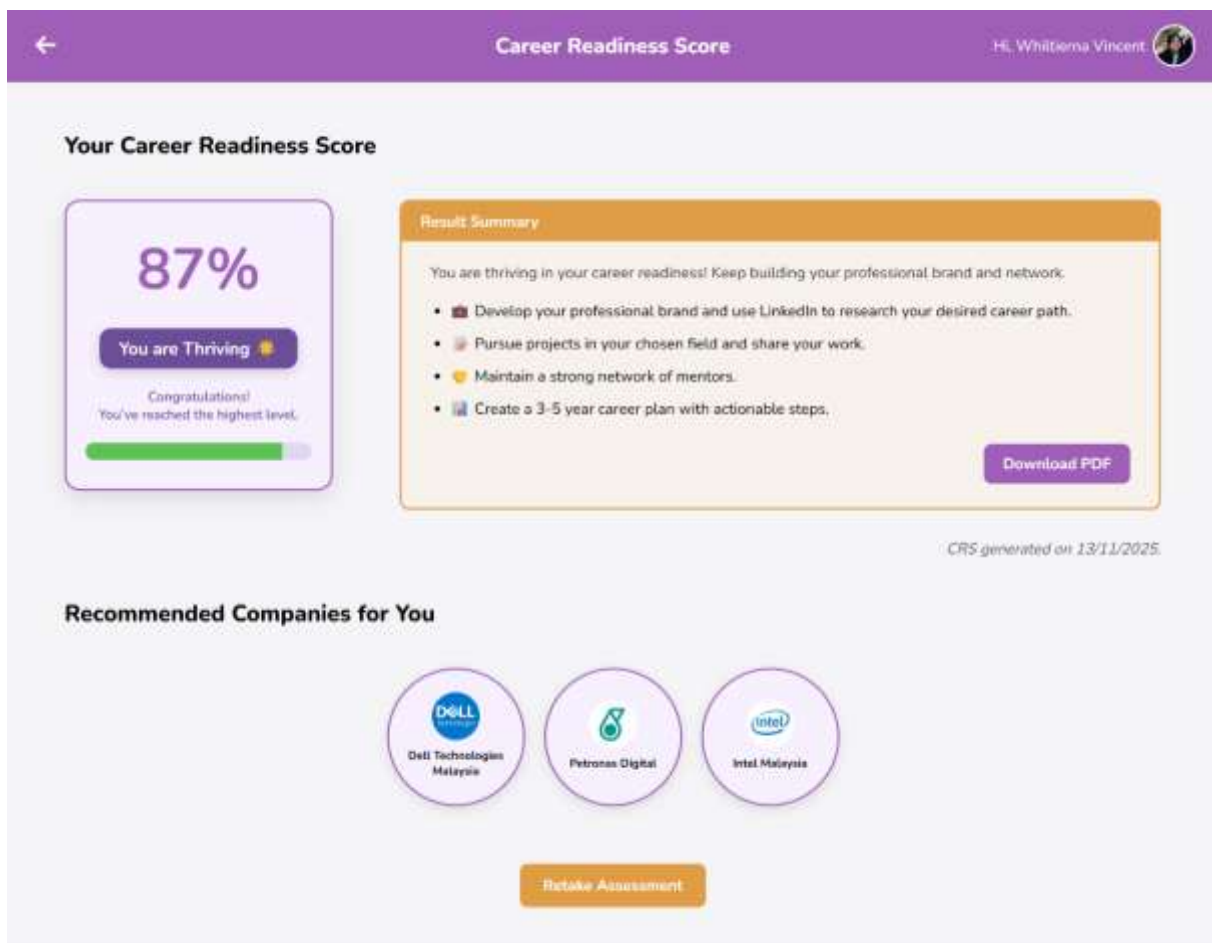
In addition to calculating students' Career Readiness Scores, the CRS module provides personalized company recommendations based on the alignment between a student's readiness level and the companies' required CRS levels. Each company is assigned a recommended CRS score range derived from its ranking and evaluation data. Companies that have not yet been evaluated or do not have feedback are marked as "TBD" (to be determined), while companies with low evaluation scores below a threshold are indicated as not recommended. For other companies, the final scores are mapped to CRS ranges corresponding to the five readiness levels: 41–60 (*Aspiring*), 61–80 (*Achieving*), and 81–100 (*Thriving*). Students whose CRS levels match a company's recommended range are presented with those

companies as suitable internship options. This feature allows students to identify companies that are aligned with their current preparedness, supporting informed decision-making during internship selection.

B. System Development

The system was designed to provide students with a structured assessment of their career readiness, personalized feedback, and company recommendations based on their CRS level. As part of the system development, a user-friendly interface was implemented to guide students through the assessment and display their CRS results (Figure 1).

Figure 1: User Interface of Career Readiness Score Module



As shown in Figure 1, students are presented with their Career Readiness Score (CRS) along with the corresponding CRS level. A personalized result summary, based on the student's CRS level, is displayed to provide guidance on areas for improvement. Below the summary, recommended companies are listed according to the student's CRS level, helping them identify suitable internship options. Finally, a "Retake Assessment" button allows students to complete the assessment again to track their progress and update their readiness score as they develop their skills.

C. Evaluation/Experimental Design

Participants

The study involved 30 final-year students from the Faculty of Computing and Informatics (FKI), Universiti Malaysia Sabah. Due to the exploratory nature of this study, the evaluation was conducted with a relatively small sample size, serving as a preliminary usability study to gather initial insights. Participants were selected using convenience purposive sampling to recruit students who were readily available and relevant to the study objectives. This approach ensured that participants were familiar with

the FKI internship process and could provide meaningful feedback on the usability and functionality of the Career Readiness Score (CRS) module.

Instrument

The usability of the Career Readiness Score (CRS) module was evaluated using the standard System Usability Scale (SUS) questionnaire, which consists of 10 items designed to assess perceived usability (Daim et al., n.d.). Participants rated each item on a five-point Likert scale, where 1 corresponded to '*strongly disagree*' and 5 to '*strongly agree*'. The questionnaire was administered online via Google Forms, allowing participants to complete it conveniently and enabling efficient collection of responses for analysis.

Experimental Procedure

The usability of the CRS module was evaluated through a structured, self-directed procedure. Participants first received a brief orientation, which included an explanation of the purpose of the CRS module and instructions on how to complete the Career Readiness Assessment. This ensured that all participants understood the system's objectives and how to navigate the assessment process.

Following the orientation, each participant independently explored and completed the assessment within the CRS module. They progressed through each of the eight competency sections, answered all items, and reviewed their overall CRS score along with the assigned CRS level. Participants were also able to view the personalized company recommendations generated based on their CRS results, allowing them to assess how the system could guide their internship selection.

After completing the assessment, participants were inquired to complete the standard 10-item System Usability Scale (SUS) questionnaire via Google Forms. This step provided standardized feedback on the module's usability, including ease of use, clarity, and overall user experience. Collecting responses in this structured manner ensured consistency across participants and enabled reliable analysis of the system's usability performance.

D. Data Analysis Strategy

The System Usability Scale (SUS) questionnaire was used to evaluate participants' perceptions of the CRS module's usability. Each participant's SUS score was calculated according to the standard scoring procedure. For odd-numbered items (1, 3, 5, 7, 9), each score contribution was calculated by subtracting 1 from the selected response. For even-numbered items (2, 4, 6, 8, 10), the contribution was calculated by subtracting the selected response from 5. The total SUS score was then obtained by aggregating all item contributions and multiplying the sum by 2.5, resulting in a score ranging from 0 to 100. A higher score reflects greater perceived usability of the module. Descriptive statistics, including the mean and standard deviation, were used to summarize the SUS scores across participants, providing an overview of the module's usability, clarity, ease of use, and overall user experience.

FINDINGS AND DISCUSSIONS

A. Result

Participant Demographic

A total of 30 final-year students from the Faculty of Computing and Informatics (FKI), Universiti Malaysia Sabah, participated in this study. Table 1 presents a summary of the demographics of the participants involved in this study, including their age distribution, gender, and prior internship experience. This overview provides context on the background characteristics of the students who contributed to the evaluation of the Career Readiness Score (CRS) module. The participants were evenly distributed by gender, with 50% female (N=15) and 50% male (N=15), with ages ranging from 23 - 26. Regarding prior internship experience, 90% of participants reported having no previous experience. However, nearly all participants indicated that they were familiar with the FKI internship process, ensuring that they could provide meaningful feedback on the usability of the Career Readiness Score (CRS) module within the Industrial Training Company Information and Ranking System.

Table 1: Participant Demographic

Demographic	Number	Percentage (%)
Gender		
Female	15	50%
Male	15	50%
Age		
21 – 22	0	0%
23 – 24	27	90%
25 - 26	3	10%
Prior Internship Experience		
Yes	3	10%
No	27	90%
Familiarity with FKI Internship Process		
Yes	30	100%
No	0	0%

SUS Analysis Result

The usability of the CRS module was assessed using the 10-item System Usability Scale (SUS), with the mean and standard deviation (SD) for each item presented in Table 2. The internal consistency of the SUS items was found to be acceptable, indicating reliable measurement of perceived usability. The positive items (Q1, Q3, Q5, Q7, and Q9) recorded high mean scores, all exceeding 4.5, reflecting strong agreement among participants regarding the ease of use, learnability, and overall confidence in using the CRS module. In contrast, the negative items (Q2, Q4, Q6, Q8, and Q10) showed low mean scores, ranging from 1.53 to 1.97, suggesting that participants generally disagreed with statements related to complexity, inconsistency, and difficulty of use.

Table 2: Mean and SD of Users' Responses

No.	Questions	Mean	SD
1.	I think that I would like to use the CRS module frequently.	4.70	0.53
2.	I found the CRS module unnecessarily complex.	1.53	0.80
3.	I thought the CRS module was easy to use.	4.57	0.73
4.	I think that I would need the support of a technical person to be able to use the CRS module.	1.97	1.43
5.	I found the features of the CRS module well integrated.	4.73	0.52
6.	I thought there was too much inconsistency in the CRS module.	1.60	1.22
7.	I would imagine that most students would learn to use the CRS module very quickly.	4.87	0.34
8.	I found the CRS module very awkward to use.	1.83	1.31
9.	I felt very confident using the CRS module.	4.77	0.63
10.	I needed to learn a lot of things before I could get going with the CRS module.	1.77	1.22

All participants achieved System Usability Scale (SUS) scores above the commonly accepted usability threshold of 68, with an average score of 90.8. This result indicates excellent usability and strong user acceptance of the Career Readiness Score (CRS) module. In addition, the consistently high mean scores for positive items, coupled with low scores for negative items, further highlight that the module is intuitive, easy to navigate, and straightforward to learn. Participants found the features to be well integrated and the overall design to be user-friendly, which supports the effectiveness of the CRS module as a usability-focused tool for assessing career readiness. These findings suggest that students are likely to engage with the system confidently and benefit from its guidance in evaluating and improving their preparedness for internship placements.

B. Discussion

The System Usability Scale (SUS) results indicate that the CRS module demonstrates excellent usability and strong user acceptance among final-year students. The high average SUS score of 90.8 reflects participants' positive perceptions of the module's ease of use, clarity, and usefulness in supporting internship preparation. This result is particularly significant given that most participants reported having limited or no prior internship experience, suggesting that the CRS module effectively supports users who may be unfamiliar with formal career readiness assessments.

For the positively worded SUS items, high mean scores were consistently observed, indicating strong agreement with favourable usability statements. Question 7 ("I would imagine that most students would learn to use the CRS module very quickly") recorded the highest mean score ($M = 4.87$, $SD = 0.34$), suggesting that participants found the system highly learnable. This may be attributed to the clear structure of the CRS assessment and the straightforward presentation of results, which enabled students to quickly understand their readiness level. The lowest mean among the positive items was observed for Question 3 ("I thought the CRS module was easy to use"), with a still-high mean score of 4.57 ($SD = 0.73$), indicating consistently positive perceptions across all positive usability aspects.

In contrast, the negatively worded SUS items recorded low mean scores, which indicates strong disagreement with negative usability statements and therefore reflects positive usability. Question 2 ("I found the CRS module unnecessarily complex") achieved the lowest mean score ($M = 1.53$, $SD = 0.80$), representing the most favourable outcome among the negative items and suggesting that participants did not perceive the system as complex. Slightly higher mean scores were observed for items such as the need for technical support ($M = 1.97$) and perceived awkwardness ($M = 1.83$); however, these values remain close to the lower end of the scale and do not indicate significant usability concerns. The variation in standard deviation for some negative items may reflect minor differences in individual user familiarity with digital systems rather than inherent design issues.

Overall, the pattern of high mean scores for positive items and low mean scores for negative items aligns with the excellent overall SUS score. These findings suggest that the CRS module is intuitive, easy to learn, and suitable for final-year students with varying levels of internship experience. However, it is important to note that this study evaluates the usability and does not measure the actual impact of the CRS module on students' career readiness or internship outcomes. Therefore, while the results indicate that students view the system as a helpful tool for assessing their readiness and guiding internship decisions, further studies are required to determine its effectiveness in improving real-world outcomes.

CONCLUSION

This study evaluated the usability of the Career Readiness Score (CRS) feature integrated within an Industrial Training Company Information and Ranking System to support student preparedness for internship placement. Using the System Usability Scale (SUS) with 30 student participants, the findings demonstrated high usability, with a mean SUS score of 90.8.

The positive usability results suggest that the CRS feature is easy to use, intuitive, and well understood by students. As usability is a critical factor influencing system adoption and engagement, the strong SUS performance indicates that the CRS feature is well positioned to support students in self-directed preparation for internship placement. By providing structured feedback and accessible guidance, the CRS complements existing internship information and ranking functionalities.

Although this study provides valuable insights, it has several limitations that should be considered when interpreting the findings. First, the evaluation involved a relatively small sample of 30 students from a single faculty (Faculty of Computing and Informatics, FKI). This limited sample size restricts the generalisability of the findings, as students from other faculties, academic backgrounds, or universities may have different levels of familiarity with internship processes, digital tools, or career readiness concepts. Consequently, the results may not fully represent the experiences or perceptions of a broader student population. Second, the study relied solely on the System Usability Scale (SUS) questionnaire, which measures participants' perceived usability of the CRS module. While SUS provides a standardized assessment of ease of use and satisfaction, it does not directly capture whether interacting with the module improves students' career readiness, soft skills, or motivation. As a result, the evaluation cannot provide definitive evidence of the module's impact on students' preparedness for

internships or long-term career development. Third, the evaluation was cross-sectional, capturing participants' immediate perceptions after using the CRS module. This approach does not allow for examination of long-term effects, such as whether students continue to engage with the module, improve their skills over time, or experience better internship outcomes. Without longitudinal data, it is difficult to determine the sustained effectiveness of the CRS in supporting students' career readiness beyond the initial interaction.

Future work can address these limitations in several ways. First, involving larger and more diverse student populations from multiple faculties and institutions would improve the generalisability of the findings and ensure that the CRS feature is effective across different academic contexts and student backgrounds. Second, incorporating additional assessment instruments, such as readiness tests, knowledge quizzes, or qualitative feedback from students and academic supervisors, would provide a more comprehensive evaluation of how the CRS influences actual preparedness, motivation, and decision-making during internship placement. Second, future studies should incorporate pre- and post-assessment designs to directly measure changes in students' career readiness before and after using the CRS module. This could include readiness tests, knowledge quizzes, or structured evaluation frameworks to provide objective evidence of improvement. In addition, future studies could examine actual internship outcomes, such as placement success rates, alignment between student readiness and selected companies, and supervisor evaluations during industrial training. This would enable a more direct assessment of the CRS module's effectiveness in real-world contexts. Third, conducting longitudinal studies over extended periods would allow researchers to examine the long-term effects of using the CRS, including how sustained engagement with the system influences students' internship success, confidence, and career development outcomes. Longitudinal research on career preparation has shown that different dimensions of preparation evolve at different rates and influence one another over time, underscoring the value of tracking changes across time rather than relying solely on cross-sectional data (Stringer et al., 2011). By implementing these approaches, future research can provide stronger evidence of the CRS feature's effectiveness and practical value, while also identifying potential areas for refinement and improvement in career readiness systems.

Overall, despite the limitations discussed, this study demonstrates that a well-designed and user-friendly CRS feature can effectively support students in navigating internship preparation, supporting self-directed learning, and informing decision-making processes. The findings provide a foundation for future research and system improvements to further strengthen student preparedness and internship outcomes.

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REFERENCES

- Azhenov, A., Kudysheva, A., Fominykh, N., & Tulekova, G. (2023). Career decision-making readiness among students' in the system of higher education: career course intervention. *Frontiers in Education*, 8. <https://doi.org/10.3389/feduc.2023.1097993>
- California State University, Long Beach. (2021). *Career readiness self-assessment*. <https://www.csulb.edu/sites/default/files/document/careerreadinessself2021.pdf>
- Daim, T. U., Sauer, J. S., Sonderegger, A., & Sürer, E. (n.d.). *System Usability Scale – An overview*. ScienceDirect Topics. <https://www.sciencedirect.com/topics/computer-science/system-usability-scale>
- Deif, A., Stark, C., Butler, K. & Olsen, E., (2017) "Evaluation of Career Readiness at an Industrial Technology Program Using a Fuzzy Approach", *The Journal of Technology, Management, and Applied Engineering* 33(1).

- Kwan, C. K., Shum, M. H. Y., Chu, T. T., & Ng, N. K. S. L. (2025). Internship: Breaking the vicious unemployment cycle for vulnerable youth. *Children and Youth Services Review*, *169*, 108122. <https://doi.org/10.1016/j.chilyouth.2025.108122>
- National Association of Colleges and Employers. (n.d.). *Career readiness competencies self- assessment*. Luddy School of Informatics, Computing, and Engineering, Indiana University Bloomington. <https://luddy.indiana.edu/doc/career-services/NACE-Competency-Self-Assessment.pdf>
- NACE Career readiness Competencies*. (2021, May 6). Career Services Network I Michigan State University. <https://careernetwork.msu.edu/resources/nace-career-readiness-competencies/>
- Rachmawati, D., Sahid, S., Mahmud, M. I., & Buang, N. A. (2024). Enhancing student career readiness: a two-decade systematic literature review. *International Journal of Evaluation and Research in Education*, *13*(3), 1301–1301. <https://doi.org/10.11591/ijere.v13i3.26485>
- Stringer, K., Kerpelman, J., & Skorikov, V. (2011). Career preparation: A longitudinal, process-oriented examination. *Journal of Vocational Behavior*, *79*(1), 158–169. <https://doi.org/10.1016/j.jvb.2010.12.012>