Project Management System

Supervisory feedback plays a key role in shaping the final outcome of final year students' dissertations. However, reviewing each student's work to determine if the given feedback has been applied correctly is a time consuming process. This inefficiency of manual decentralised document management, email-based communication and progress tracking necessitates supervisors keeping track of different versions of students' work – learning costs and experiencing cognitive fatigue due to its repetitive nature – psychological costs. Hence, it classifies as an administrative burden and ultimately affects the ability of supervisors to both perform other responsibilities such as research and teaching as well as providing high-quality feedback (Woeler et al. 2023, Moynihan et al. 2015). This in turn results in vague and often insufficient feedback, making it more difficult for students to identify and resolve underlying issues, which can trigger a loss of motivation for both parties. In addition, the absence of an automated meeting scheduling and reminder system can increase the likelihood of scheduling conflicts and students missing deadlines. Collectively, these inefficiencies directly impact the quality of the final deliverables and the academic experience for both the students and supervisors.

Therefore, these processes will greatly benefit from having automated workflows to assist in mitigating the issues mentioned. The expected outcome of incorporating digital tools into dissertation supervision is for there to be a significant reduction in administrative load for the supervisors, leaving more time for them to conduct frequent and constructive meetings with the students. The core features of such type of software will consist of meeting scheduling and notification, project management, AI-powered feedback checker and a progress logger. The first aims to provides a framework for effective communication to take place, thus, ensuring that the objectives and expectations for both the students and supervisors are aligned, reducing potential misunderstandings. The project management and feedback checker sub-systems will work in conjunction to make sure that both parties are always using the latest versions of the documents, while also performing a form of regression testing to verify that previously addressed feedback remains implemented, preventing earlier issues from re-emerging in later drafts. Lastly, the progress logger will keep track of all changes

made to the drafts, providing a way to audit revisions and goals for both the supervisors and the students.

Existing software solutions include Learning Management Systems (LMS) and Thesis Management Systems (TMS). While LMS are not specifically designed for dissertation management, they comprise of communication tools to schedule meetings and reminders. A notable example include Moodle Gateway Database, that allows for students to submit document drafts and meeting recordings as records in a database and for supervisors to follow up on those drafts such as providing feedback and sending reminders (Wordpress.com, 2025). TMS platforms such as Creatrix, on the other hand, are designed to streamline the dissertation lifecycle. Creatrix – encompassing both LMS and TMS - offers comprehensive features including document tracking, automated reminders upon work submission, feedback acceptance and low-code/no-code capabilities for further workflow automation (Creatrixcampus.com, 2025). Other TMS also provide transparency to the dissertation and supervision process by keeping an audit of communications and students' work progressions. These solutions have the advantage of providing integration with a university's student information system.

However, a COTS approach – adapting these LMS/TMS platforms to cater to the specific requirements of the project management system – poses considerable risks and flaws such as the inherent lack of flexibility and customisation without compromising requirements as well as being packaged with unwanted features which is the case for Creatrix since it forms part of a software suite. The core problem with these platforms is that while they centralize document and feedback storage, the pertinent issue of automating the review process remains unsolved since it is still left as a manual task for the supervisor.

References

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