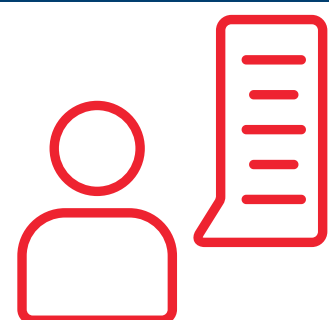


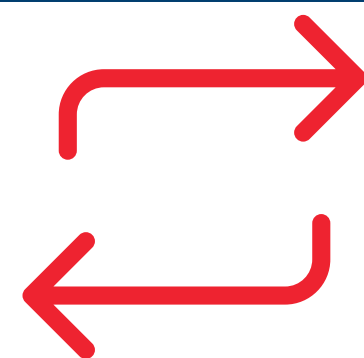
## Title: Optimisation of the Student ID Card System using Digital Solutions

Presenters: John McCarthy, Student Records & Examinations



### Case Study Synopsis

This case study pertains to the optimisation of the delivery of a core administrative function of the Student Records and Examinations Office (SREO), one of the busiest central Professional Services of the University. Every academic year, the SREO provides all newly registered students with student ID cards. The original system saw large groups of students turn up at irregular times, form queues to have pictures taken and receive their cards. This led to staffing inefficiencies, as well as lengthy queues for students during peak times. A new system was needed.



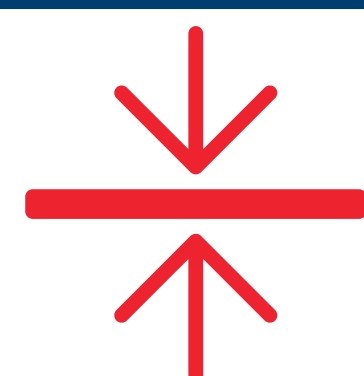
### Intended Changes

A new student ID card issuing system was designed and implemented by John McCarthy for the SREO at the request of Dr Siobhán Cusack and under the direction of Helen O'Donovan. It was designed as a means of controlling the flow of the ~6000 first-year. Undergraduate and Postgraduate students to collect their student ID cards over a busy four-week period. Student numbers were managed along government guidelines pertaining to numbers per building and spacing between individuals.



### Key Impacts

- The new system was further improved, reaching a high level of processing efficiency coupled with the consistent collection of statistical evidence on card issuing outputs. Upon its third year of operation, the emphasis has moved away from health guidelines adherence and towards maximising efficiency. In its current operational version, the system has reached a processing rate of 240 students per hour, obtained by means of 2 queues running with 10 slots available per 5-minute intervals. This allows for large numbers of students to be processed at a near continuous flow. It has also removed downtime between groups of students streamlining the task and returning up to half the day's work hours back to staff.



### Area of Alignment

Learning & Teaching  
Student Success



### Additional Information

Given the urgency of the intervention and the University's directive of availing of already available licences, Microsoft Bookings was adopted for this purpose. However, it would not have been suitable to handle such large numbers, without some creativity. Additional Office 365 email accounts had to be created to simulate staff members as the emails generated by so many students would have been unmanageable. These accounts became the queues. Microsoft Booking's minimum time of 5 minutes per appointment also had to be worked around. In order to discover a manageable flow of students for the relevant staff, different numbers were tested on smaller PG groups. By latticing the start times and increasing group sizes per 5-minute slot, continuous flow could be attained. The remaining unused queue accounts were kept in case more capacity was needed at a future date. Furthermore, it was discovered that the percentage of late-comers balances out with early-comers when dealing with such large numbers. Creating a stable flow of students during opening times was more important than keeping them to strict timeslots.



- Furthermore, while the previous system allowed for only rough estimates of the student cohorts present on campus, now the total number of students per day can be easily exported into Excel spreadsheets and analysed. This high level of efficiency was obtained because of a range of trials over time that simultaneously considered the following factors: staff availability, student numbers, building congestion levels and ID card printing rates. The booking system was further optimised in 2021 by the addition of the new photo upload system created by the Digital Hub Project, which allows students to have uploaded their photos ahead of time. Three years on, the new system has proved so effective at improving the experience for students and staff that it has permanently replaced the previous one, even after the easing of regulations.



### Video Links | Graphics

The link to this system has been incorporated into student registration confirmation emails and onto the SREO website so that messaging is clear and consistent (<https://www.ucc.ie/en/student-records/id-cards/>). The functionality also allows for google maps integration.