

Committee on Graduate Admissions Annual Report June 13, 2013

Summary

In the 2013 graduate admission season, 30 graduate programs at MIT utilized the GradApply software platform to process their graduate applications. As anticipated from the favorable review of the 2012 admission season, the users overwhelmingly found the admission platform to be extremely beneficial to their admission process by enabling remote access of applications for reviewers, by reducing the time necessary to administer the applications, by providing significant savings in costs, and by improving the overall robustness of the various admissions processes in many different ways. The GradApply developers, Prof. Frans Kaashoek, Prof. Robert Morris and Dr. Dorothy Curtis, continue to be extremely responsive to individual requests by departments/programs to tailor GradApply to be flexible to meet their particular needs. Additionally, GradApply continues to collect standard data required for admission decisions and exports the submitted application to Grade20. The review activity of the Committee on Graduate Admissions (CGA) suggests three major recommendations for consideration, namely:

- 1) continue to develop documentation to instruct new users and to review any updates or enhancements for returning users;
- 2) enhance visual aesthetics of interface for applicants and to further facilitate ease of use for administrators and faculty;
- 3) extend integration capabilities between GradApply and Grade20.

The 2013 annual report comments on the value added to MIT by the development of GradApply and documents the extensive utilization of the software platform across the Institute for graduate admission. The process conducted by the CGA to review the adoption and use of GradApply is described; the user survey that was used for 2013 is found in Appendix A. Finally, the recommendations are described more fully. In Appendix B the complete list of replies to the survey questions: “Do you know of any missing features or software ‘bugs’ that have not been fixed yet?” is provided. Appendix C lists the committee directive from the Office of Dean for Graduate Education (ODGE).

Value Added to Admission Process by Development of Grad Apply

The GradApply developers, Prof. Frans Kaashoek, Prof. Robert Morris and Dr. Dorothy Curtis, are truly amazing. Their service to MIT, by the creation of GradApply and by their assistance to the adopters of the software platform, is remarkable and must be commended. Below are just a few quotes from faculty and administrators from around the Institute that reflect how much they are valued.

“Developers were fantastic and incredibly responsive. We could expect a response from them within hours of the request.”

“As mentioned before, Frans Kaashoek, Robert Morris, and Dorothy Curtis have been exceptional to work with. I have been very impressed with their responsiveness to my questions and requests-especially knowing the other things they have going on, and recognizing we are not the only users of the system. Our

requests for changes were always completed in a timely manner and the developers were always willing to -at least discuss, and often activate-our ideas. It has truly been a pleasure to work with them and we are incredibly appreciative of their assistance and efforts!”

“Excellent responses, very timely. Heroic, considering how many departments/programs was transitioning the same year.”

“Frans and Robert have always been quick to reply to any questions, make improvements, and troubleshoot for our staff, faculty, applicants, recommenders, etc. I honestly don't know how they do it, but I'm thankful that they do! Their system and support have made our admissions process 100% better.”

Utilization Data

Dept/Program	Number of Applications Processed	Dept/Program	Number of Applications Processed
AeroAstro	544	NSE	140
BCS	542	CMS	146
Biology	562	Economics	814
CDO	77	HASTS	153
CEE	639	LP	460
ChemE	421	EAPS	200
Chemistry	610	Architecture	1132
CSBi	190	DUSP	483
EECS	2781	WHOI	307
ESD (all)	576	MAS	689
Math	512	HST	180
MechE	1303	BE	399
Microbiology	83	Political Science	463
Physics	775	ORC	325
PreHealth	122	Science Writing	52

The table seen above lists the programs that used GradApply for the 2013 admissions season with the number of applications that were processed. [Note: the data was provided by MIT Institutional Resources as reported by June 7, 2013; some data may be incomplete and hence the final number of applications processed may differ.] IS&T indicate that for the upcoming admission season, 2014, all graduate programs at the Institute, except for Supply Chain Management, will use GradApply. Also the intentions of the Sloan MBA programs and their adoption of GradApply are unclear at this time.

CGA Review Process

The committee followed a process similar to that used for the 2012 review period. Specifically, the committee created a new survey building upon the original survey offered in 2012. The 2013 survey targeted graduate administrators, graduate officers, graduate admission chairs and also key users of the GradApply. To identify key users, graduate officers were asked to submit additional names of any faculty/staff/student that used GradApply and who should be polled for

their opinion. The committee included both previous users and new users of GradApply in the list of survey respondents. In total, the number of individuals who were sent the survey (by MIT Institutional Resources) was 76. The 43 replies (57% yield) from the survey were discussed by the committee along with Dr. Dorothy Curtis (one of the GradApply developers). A meeting of all survey respondents was organized to share some summary results of the survey and to invite discussion of concerns/issues/remedies.

Summary of 2013 Survey

The questions posed in the 2013 survey can be found in Appendix A of this report. Here, a brief summary of the survey replies will be offered. Of the respondents, 23 were new users of GradApply, 19 were previous users, and one did not use GradApply (Sloan MBA program). They were moreover representative of the different population of users: faculty (13), administrators (25) and key users (5). The admission application tools that were reported to be used previously included CollegeNet (predominantly), Grade20, paper folders or their own system. As in last year's survey, respondents indicated that using GradApply greatly reduced both the time needed to complete the review process and the administrative effort of processing applicant files. The ability to access the applications remotely was deemed extremely beneficial as well. A comment was offered: *"The average number of reviews per admitted student went from about 2 to 6. We feel that the quality of our admissions decisions is now much more robust."* Significant savings were achieved with regard to time, but also in cost since, in some cases, temporary hires and staff overtime could be eliminated. As was observed last year, the developers were extremely responsive to the needs and requests of the users. A comment was submitted: *"Frans, Robert and Dorothy have been VERY responsive tailoring the system in response to our admissions committee's input/feedback."* With respect to documentation, the users found the user group and email list very valuable and indicated that they could learn from each other. Of course asking the developers directly was found to be the best solution to a question, but, being cognizant of the value of the developer's time, the users felt "guilty" of/uncomfortable about making such requests. [The summary of all survey replies is available upon request.]

Committee Recommendations

The primary issues raised by respondents were:

- 1) need for improved documentation;
- 2) improvements of the visual aesthetics of the application and administrative interfaces;
- 3) integration of data between GradApply and Grade20.

Respondents felt also that a successful Institute-wide implementation of GradApply warrants careful consideration of the resources that must be provided to guarantee that the software platform will continue to be updated and supported over the long term. Finally, users requested that an Institute-wide process be established for reporting receipt of fraudulent applications while keeping in compliance with FERPA guidelines.

In response to the three primary issues, the CGA offers the following recommendations.

RECOMMENDATION: Continue Improvements to Interface & Documentation

A number of faculty and administrators voiced a need for continued improvements to the user interface of the system and for more extensive documentation of its features. There were concerns raised about the interface for the three main groups of users: student applicants on the public/front end of the system; staff who are administering their departments' use of GradApply during the admissions process; and faculty who are using the system as part of the admissions process itself (accessing, evaluating and making decisions about applications). For the student applicants, the main concern was that our system, while robust in its functionality, does not look as polished as the equivalent systems of peer institutions. The faculty and administrators who have now used the system have noted what a vast improvement GradApply has made to their respective admissions processes. At the same time, some of these users noted that a more intuitive and user-friendly interface would make the system even more effective for their departments, especially for departmental faculty and staff who have less background in the computer sciences. There were some specific suggestions about how to improve the interface on the administrative side; these ranged from replacing the drop-down options "0/1" with "Yes/No" to making searches and the generation of custom reports more intuitive for less experienced users. Closely tied to these concerns, a number of users expressed the desire for more documentation – in the form of written instructions and tutorials, FAQ's, wikis, etc. – as well as training sessions for new users and refresher sessions for returning users. One survey respondent noted: *"While I feel that the system has a large degree of flexibility and additional functionality available, our department has not always been able to readily make use of these functions due to a lack of knowledge as to how to best utilize the system."*

Based on this feedback and our own assessment, the CGA recommends that resources be allocated to:

- a) design and put in place a more polished interface for the public end of the system, i.e. for applying students;
- b) design and put in place a more broadly intuitive user interface for the faculty/administrative end of the system;
- c) write more extensive documentation and provide regular training sessions in order to make the system's robust features and functionality more accessible to a variety of departmental users.

The committee recognizes the importance of focusing the time volunteered by the developers to making improvements to functionality, adding features, and making user-specific modifications to the software. Perhaps a user group could be engaged to develop appropriate documentation and training materials. Currently, some user groups have created their own instruction manual or instruction tools. In addition, the user group email list has generated and documents numerous questions with answers that could be used to begin more complete documentation tools. The online tutorials were used by many users but may need to be updated as changes/enhancements are created to GradApply. Finally, with appropriate new resources, dedicated staff should be hired to carry out (a) and (b) above, and perhaps a vendor could be contracted to develop complete documentation as noted in (c).

RECOMMENDATION: Improve Data Integration

Many users commented that data in Grade20 and GradApply needs better integration. The CGA recommends that such integration improvements, described below, should be considered.

Grade20 creates a record when an application is first submitted through GradApply. If an applicant later updates information in GradApply, the record in Grade20 is NOT updated automatically. Either the administrator or Central Admissions has to update the data manually in Grade20, but there is no way to know to do so unless the applicant contacts an administrator. Significant benefits could be realized if Grade20 could update automatically on a regular basis, so as to reflect any changes made in GradApply.

A second integration issue involves admission decisions. Again, users would find benefit if admission decisions that are entered in GradApply could be transferred to Grade20; ideally, applicant reply decisions could be transferred as well. Such communication between GradApply and Grade20 would replace the current method of accessing each Grade20 record one at a time and entering the different types of decisions.

One final integration request involves exporting MIT IDs and standardized test scores (GRE, TOEFL, IELTS) from Grade20 to GradApply. Currently, applicants self-report their test scores in GradApply, whereas official test scores are submitted to Central Admissions and scores are then imported to Grade20. Official scores are certainly required, but Grade20 does not import these data to GradApply. Similarly, MIT IDs are generated overnight when a record has been created in Grade20, but the MIT IDs do not automatically migrate to GradApply.

In summary, there are 3 main integration enhancement requests:

- a) allow changes in GradApply to update the Grade20 record automatically on a frequent schedule;
- b) allow admission decisions and reply decisions to transfer from GradApply to Grade20;
- c) allow MIT IDs and test scores (GRE, TOEFL, IELTS) to transfer from Grade20 to GradApply.

In conclusion, the Committee on Graduate Admission identified three predominant issues that require consideration concerning the Institute-wide adoption of GradApply. The three issues concern the user interface, documentation regarding the use of GradApply, and the integration of data between GradApply and Grade20. Recommendations are offered to address each of the three issues. In Appendix B, a complete list of missing features or remaining software ‘bugs’ is provided as part of the replies received with the survey. The committee considers these replies as individual requests that the developers may consider separately.

APPENDIX A: 2013 Survey

Dear Graduate Officers, Graduate Admissions Chairs, and Graduate Administrators,
For at least this past admissions cycle, your graduate program has employed the all-electronic graduate admissions software platform developed by Professors Frans M. Kaashoek and Robert T. Morris in EECS. We would like to consider your feedback concerning the EECS software in order to both plan the expansion of its use to the remaining graduate programs, and improve its functionalities. We thus kindly ask you to fill out a brief online survey *before Friday May 10th at 5pm* (tentative). Thanks in advance for your help,
Prof. Leslie Kolodziejcki, Chair of the Committee on Graduate Admissions
For questions, please contact Clarice Aiello (clarice@mit.edu), staff for the Committee

(16 questions)

1. In which admissions year-cycle did your program start using the EECS software?
2. What admissions platform and processes were you using prior to the transition to the EECS system?
3. How many applications did the EECS system process this cycle for your graduate program?
4. Please comment on the training process and documentation, and any recommendations for future development for training purposes. What resources are available when questions or comments arise?
5. Describe the improvements you have observed in your graduate admissions process due to the transition to the EECS system.
6. Have you realized any savings in cost and/or time in your graduate admissions process due to the use of the EECS system? If you can estimate any of these savings, please provide this information.
7. Describe any challenges you have faced with the new EECS system.
8. Describe any challenges you have faced with the interface with central enterprise systems (e.g. Grade20).
9. Does your faculty find the EECS system effective and user-friendly? Do you have any other feedback from them?
10. If you requested changes to the system, how well have the developers responded to the request? Was the request completed in a timely manner?
11. Are there currently missing features whose implementation would benefit your program?
12. Do you know of software bugs that have not been fixed yet?
13. Provide any additional comments and suggestions on the EECS platform.
14. Did you find the application easy to use and to navigate?
15. Please briefly describe how your program evaluates graduate applications, from receiving them to reaching an admissions decision. [Ex: Applications received; distributed to faculty by research interest; faculty rank them; faculty meet to review all applicants and admit the top 10%.]
16. What improvements to the process, described above in question 15, do you feel are needed?

APPENDIX B: 2013 Survey Replies to Questions #11/#12

Missing Features, remaining bugs? - A comprehensive desiderata

- a. Enter decisions into GradApply + Grade20 automatically
- b. Add a numeric score for multiple readers
- c. Extend post-admission feature to keep track of additional data
- d. Save frequently downloaded reports
- e. Automatic validation of scores reported to MIT
- f. Add an "application complete" check box
- g. Have a complete data dump
- h. Add flexibility for use in multiple review rounds
- i. Record email function
- j. Save pdf documents as 'read-only', given confidentiality of information
- k. Add space for notes that is only accessible to that reader
- l. Bulk operations which are easier to understand and use
- m. Auto generated confirmation email when application is submitted
- n. Ability to copy/paste from the letters of recommendation
- o. Ability to roll information/documents over into a different cycle if applicant choose to postpone their application
- p. Add 'back arrow' or 'home page' link
- q. Choice of UG major fields too limited, want to add own (ex: Criminal Justice, Public Policy, Law as a minor, split Anthropology/Archeology)
- r. Add tags in review window
- s. Ability to hide the financial state for need-blind admissions
- t. Desire ability to scroll uniformly thru GradApply
- u. Notification each time a new letter has been uploaded to an applicant's account
- v. Resolving the issue of multiple MIT IDs being generated for applicants who have previously applied to MIT or been enrolled as a visiting student
- w. Applicant can make changes to their application after the deadline; need notification that a change was submitted
- x. Field to enter financial support information for students faculty intend to admit
- y. Feature to strict limit the number of letters of recommendation
- z. Send attachments with email (ex: letters with electronic signatures)
- aa. Delete user account rather than just deactivate
- bb. Customize font, color (to make some screens easier to read)
- cc. For all the information that resides under the black line at the bottom of the applicant's file, ability to write in our own header or instructions
- dd. Ability for readers to not see (or not be able to edit) all fields, in the same way some tags are only allowed to be used by the chair
- ee. 'erase reviews' too close to 'reassign folders'
- ff. Bulk email has a bug and did not send email
- gg. Reopening a file that has already been rated, the rating window is blank (rather than showing the previously entered rating)
- hh. The server went down momentarily during last day of application deadline
- ii. Clicking on the 'print' button in an applicant's file, sometimes the resulting PDF does not include all letters of recommendation, especially when the letter has been submitted as a Word document
- jj. Change 'mit_accept' to 'mit_enroll' because the terms can be easily mistaken
- kk. Interactive links in uploaded CV were not maintained in the version that appears in the application file
- ll. Applicants with double majors are difficult to identify
- mm. International applicants should be blocked from entering data on ethnicity and disadvantaged backgrounds since these categories only apply to US citizens/permanent residents
- nn. Ability to search on any and all fields
- oo. Ability to search by portion of a name (or first name)
- pp. Chairs should be given more customization power (ex: choice of: whether reviewers can view each other's scores; grading scale; whether faculty receive messages when applications are newly assigned to their division)

APPENDIX C: Committee Directive by ODGE

Charge

The CGA will serve as the primary Institute body for review and oversight of the graduate admissions transition to the EECS platform. The CGA will periodically review, discuss and provide feedback and recommendations to the project team on the all-electronic graduate admissions system including, for example; individual graduate program transitions, customization, maintenance, enhancements, integration with Institute enterprise systems, and student information privacy considerations (in consultation with relevant committees such as the Committee on Student Information Policy).

Process

The CGA will coordinate meetings between transitioned departments to exchange information on the transition and also will carry out research by interviewing the transitioned departments individually.

Membership

Leslie A. Kolodziejski, Chair (Graduate Officer, Electrical Engineering and Computer Science)

Vivek Bald (Writing and Digital Media)

David L. Darmofal (CGA Chair; Aeronautics and Astronautics)

Xavier de Souza Briggs (Urban Studies and Planning)

Sumeet Kumar (Graduate Student Representative, Mechanical Engineering)

Suzanne Maguire (Graduate Administrator, Chemical Engineering)

Bjorn Poonen (Graduate Officer, Mathematics)

Noah Bidgood (Admissions Office, Office for the Dean for Undergraduate Education)

Staff to the Committee: Clarice Aiello (Graduate Student, Nuclear Science and Engineering)

Reporting

The Chair of the CGA will meet with the graduate admissions project team biannually (2012-2013) to report out their findings and provide recommendations.