I. Pilot Goals and Overview

A. Platform Goal

Combine a video management platform and lecture capture system into one tool, replacing Yale’s current tools, Echo360 and Kaltura. A unified platform would create media tools for everyone, faculty, students, departments and centers, all following a high quality, ease-of-use approach helping to enhance residential teaching and drive online learning.

B. Community Needs

In 2014, Yale’s Technology Architecture Committee commissioned a report analyzing the current landscape of video-related services at Yale. Of these findings, challenges were uncovered in the areas of video distribution and hosting including:

1. No central repository of sharing media materials for teaching and learning.
2. Use of multiple and disconnected public platforms (Vimeo, YouTube, iTunes U).
3. Lack of cross-course sharing of instructional assets for communal access and appropriate reuse.
4. No access to video libraries for other web-based platforms used for teaching (ex. Course-press, Drupal).

Along with findings of the 2014 working group, the Center for Teaching and Learning has collected feedback
from instructors and departments across the campus about methods to easily create, post, share, catalogue and reuse content in their courses. As video becomes more a more impactful pedagogical tool, both for online and on-campus learning, it became imperative for Yale to consider a unified media platform to address these issues.

C. Pilot Goal

This pilot was intended to evaluate Panopto as a solution for both lecture capture and video asset management.

D. Selection of Panopto for Evaluation

Workday acquired MediaCore on September 29, 2015 and announced they would shut down the platform within one year. CTL immediately began a search for an alternative solution following the same goals listed above. Eight platforms were reviewed by an ad-hoc group consisting of CTL, ITS, and various professional school representatives. Of the platforms reviewed, Panopto was found to align closest to our requirements, with the strongest showing in the three areas of highest priority: ease of use, video creation and curation, and accessibility.

This pilot was intended to verify the features and requirements of the Panopto platform, and involved representatives from across campus. Many cases were tested, and while any one working group member might have only tested a subset of features, our intention was to represent, collectively, testing for the overall platform.

II. Technical Requirements and Verification

A. Requirement List

This requirement list was established during the working group’s first meeting. These requirements we’re agreed upon by all working group members, and constitute feature evaluation along evaluation goals listed in APPENDIX B: PILOT TESTING GUIDE.

<table>
<thead>
<tr>
<th>Requirement</th>
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<tbody>
<tr>
<td>Ease of Use</td>
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<tr>
<td>Mobile Friendly</td>
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<tr>
<td>Video Quality</td>
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<td>LTI for Sakai</td>
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<td>LTI for Canvas</td>
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<td>Video Portal use of platform by Yale community outside of LMS (academic and non-academic)</td>
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<td>Ability of users to create and manage their own content (Individuals, Schools, departments, etc.)</td>
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<td>Content ingestion from dedicated hardware capture devices</td>
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<tr>
<td>----------------------------------------------------------</td>
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<tr>
<td>Publishing of podcasts/vodcasts</td>
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<td>User Metrics by content creators, particularly faculty collected from all sources.</td>
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<td>Live Video Webcasting</td>
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<td>Responsive Support system</td>
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<td>FERPA Compliance</td>
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<td>Student submission of video content (WYSIWYG/Shared folder) where instructor only has access.</td>
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<td>Search</td>
</tr>
<tr>
<td>Content owners should be able to organize assets within folders or subdirectories, and ideally have control over the ordering of the assets within any folder (i.e., not solely alphanumeric sort).</td>
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<tr>
<td>Content sharing (common files, folders, and departmental collections) avoiding duplication and disorganization.</td>
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### B. Faculty Usability Group

Faculty feedback was a critical component of the Panapto evaluation. Members of the working group identified faculty they felt would be offer valuable insight on Panapto, including how it would satisfy their personal requirements and work flow. We also asked them to provide general feedback on the tool such as rating its overall ease of use.

- Participating Faculty

Three faculty members used Panopto in their Spring 2016 courses. They were supported by CTL staff and staff from the Center for Language Studies. They completed a brief survey at the end of the semester. Full results can be found in Appendix C: Faculty Usability Group results

Additionally, the platform was evaluated by an instructor in the department of economics. Though not used in a class setting, the instructor evaluated Panopto extensively and provided written comments also included in Appendix B.

- Feedback Summary

Overall the faculty usability group had a positive experience with Panopto, all reporting it helped them achieve their goals for the course. Here are responses to the question of whether they would use Panopto again.

“Absolutely. It was great to be able to comment directly on the videos and to open up a discussion for the students.”

“Yes! It was very easy and convenient for the course members use (faculty and students).”
“I will definitely use this tool again for all of my language courses.”

One faculty reported issues with student uploads.

“...some students said their movie is too big to upload (1.3gb), so they have to use either YouTube or a drive.”

The above issue was attributed to the students uploading via the dropbox tool in ClassesV2 rather than through the “dropbox” Panopto feature. Yale made a direct request to change the tool’s name in Panopto. Panopto agreed and the student upload folder is now called “assignment folder.”

III. Results of working group vote and official recommendation

On May 4, 2016 the working group convened a final meeting on evaluation and recommendations.

Recommendations:

1. The group voted unanimously to recommend Yale adopt Panopto replacing our contracts with Echo360 and Kaltura.
2. The group recommended content from Echo 360 and Kaltura be available for users to migrate into Panopto.
3. Working group leaders identified gaps in the migrations process. The recommendation to extend use of Kaltura for Yale Summer Session online for one additional year, and extend the main Kaltura license an additional month to accommodate Yale Summer Session B.

Working Group Members
(in alphabetical order)

Abuin, Pilar, Center for Teaching & Learning,
Barber-Marini, Timberley, Center for Teaching & Learning
D’Addio, Christopher, ITS West Campus
Donohue, Pete, School of Public Health
Draghi, Keith, ITS
Drake, Adam, ITS
Garrett, Mathew, School of Forestry
Griffin, Dan, Law School
Harford, John, Center for Teaching & Learning
Johnson, Greg, School of Music
Kase, Austin, School of Music
Leydon, Gary, School of Medicine
Malinowski, David, Center for Language Studies
Maj, Lec, ITS
Monroy, Pete, ITS
Packtor, Jordanna, School of Forestry
Patterson, Pam, Center for Teaching & Learning
Pauze, Brain, Law School
Reynolds, Matt, Center for Teaching & Learning
Vincent, Cangiano, Center for Language Studies
Appendix A: Pilot Timeline

Pilot Timeline

February 15 – Account creation for all Working group members
February 22 – Canvas LTI integration, ClassesV2 LTI integration per course by request
February 23 – Working Group Kick off Meeting
March 7 – TAC (Technology Architecture Committee) approval
March 30 – Working Group status meeting
April 1 – ITS SDR (Security Design Review) complete
April 13 - Hardware/Software device installation (targeted for testing
May 4 – Summary of evaluation data and final vote on platform.
July 9 – Full LTI – Sakai integration
July 15 - Registrar approval

Appendix B: Pilot Testing Guide

A. Tool Usability and Functionality

Validate the usefulness of Panopto for on-campus teaching and learning

1. Evaluate the overall usability of Panopto, via web-portal, Canvas and Classes*v2
2. Ensure that the most common tasks are easy to perform by faculty and students.
3. Ensure that the Panopto equivalents of the most frequently used tools in Kaltrua, Echo360 or other video asset management/capture/streaming platforms are tested and meet expectations.
4. Determine ease of reusability of videos across course sites and from one semester to the next.

B. Supportability

Identify the types of campus-based support that might be required for a broad Panopto rollout

1. Evaluate the effectiveness of Panopto live and email support.
2. Determine whether Panopto-provided online documentation is sufficient for resolving most platform-specific questions
3. Identify how much local support faculty may need to migrate content from Kaltura, or other platforms into Panopto.
4. Measure the amount of independence faculty members gain over time when using Panopto.
5. Determine what types of local outreach, training and Yale-specific documentation may need to be in place before a broad Canvas rollout could take place.

C. Operational Robustness and Vendor Relations

Verify that the cloud-hosted Panpoto offering meets campus technical expectations

1. Measure the platform stability, responsiveness and availability
2. Ensure that Panopto meets or exceeds Yale’s accessibility and data security standards
3. Evaluate the effectiveness of Panopto’s asset management by establishing a school/department hierarchy of sub-accounts based on administrative privileges as appropriate for course administration and departmental needs.

4. Assess Panopto’s responsiveness to Yale’s needs and priorities.

Appendix C: Faculty Usability Group Results

- Direct feedback

Douglas McKee
Associate Chair and Senior Lecturer, Economics
Lecturer, School of Medicine

“The web-based UI for managing and browsing the video library is much more usable than the other platforms I’ve used (MediaCore, Echo360, and Kaltura). Search is miles better and I especially like that it automatically converts the speech in the videos to searchable text along with text that’s in the presentation. The search results point to the exact point in the video where the search term is used--My students would *love* that.

The recording software looks pretty good too. I really like how you can combine the camera feed and screen capture into one video. The editing features could be stronger, but if I want to do serious editing, I can download the videos and edit them in the software of my choice and re-upload.

The stats look terrific too. It’s got pretty pictures that give you an overview of how many students are watching the videos and where they are dropping out during individual videos. You can also look at reports for individual students. It also looks like you can download the raw data which will be great for me as I like to do my own analytics.”

- Survey Feedback after Course testing

Ninghui Liang
Senior Lecturer I in East Asian Languages and Literatures

Q1) Did Panopto help achieve your goals you set fourth?
   o Yes.

Q2) We’re you satisfied with the results?
   o Yes. But some students said their movie is too big to upload(1.3gb), so they have to use either YouTube or a drive.

Q3) Would you recommend this tool to other instructors?
   o Yes

Q4) Would you use this tool again for this and other video related needs?
   o Yes

Angela Lee-Smith
Senior Lecturer I in East Asian Languages and Literatures

Q1) Did Panopto help achieve your goals you set fourth?
   o Yes! It was very easy and convenient for the course members use (faculty and students).
Q2) We’re you satisfied with the results?
   o  Yes, highly satisfied.

Q3) Would you recommend this tool to other instructors?
   o  Absolutely!

Q4) Would you use this tool again for this and other video related needs?
   o  Yes, I will definitely use this tool again for all of my language courses.

Sybil Alexandrov
Senior Lector II in Spanish and Portuguese

Q1) Did Panopto help achieve your goals you set fourth?
   o  Absolutely. It was great to be able to comment directly on the videos and to open up a discussion for the students.

Q2) We’re you satisfied with the results?
   o  Yes. I would make clearer instructions for students/participants in the future (for example: my students wrote discussion comments in Spanish, which made them inaccessible to non-Spanish speakers).

Q3) Would you recommend this tool to other instructors?
   o  Yes. Very useful for class discussions for existing videos or for videos created for this purpose.

Q4) Would you use this tool again for this and other video related needs?
   o  Yes!