ESUP-Days
November 2018

Opencast: Lecture capture & student impact, scaling to 60,000 hours video recording per year and approaches to implementation
27,000 Undergraduates
40,000 Total Students
12,000 Staff
240 Buildings
In Numbers

362 Rooms equipped

62,000 Hours per year

250,000 Hours captured

6 Million views per year
Lecture Capture

Lecture Theatre Capture

Video Delivery to Students
Useful Info

Lecture Theatre Capture

Video Delivery to Students

- Scheduling
- Capture
- Processing
- Integration
- Management
- Distribution
- FOSS
Video Views per Day

Sep 2017 - June 2018
Student Response to the questions “The Best Thing on Blackboard?”

- Podcasts: 70%
- Discussion Board: 10%
- Learning Modules: 10%
- Lecture Slides: 10%
- Other: 0%
Graph 1: End of Unit Examination Results: Percentage of Class Attaining Results Range

Two-tailed unpaired t-tests:
2007 (mean=52.0%, SD=15.4)
2008 (mean=51.9%, SD=17.2)
t=0.03, p=0.97

2007 (mean=52.0%, SD=15.4)
2009 (mean=58.3%, SD=11.9)
t=4.69, p=3.87 x 10^{-6}

2008 (mean=51.9%, SD=17.2)
2009 (mean=58.3%, SD=11.9)
t=4.44, p=1.22 x 10^{-5}

Podcasts introduced in 2009
A Lecture → No Action → Recording Made

A Lecture → Opt-Out → Not Available

A Lecture → Trim / Hold → Recording Made
A Lecture -> No Action -> Recording Made

Opt-Out -> X -> Not Available

Trim / Hold -> ✔ -> Recording Made

DASS Recording
A Lecture → Opt-Out

No Action → Not Available

No Action → Recording Made

No Action → DASS Recording

No Action → Trim / Hold

DASS Pre-Publish → Publishing

DASS Pre-Publish → Over-Write
How often have you made use of recorded lectures in Semester 1? (Sep 2016 to January 2017)
How important would you rate having access to lecture recordings?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Rating</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unimportant</td>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>1.2%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>11</td>
<td>12.8%</td>
</tr>
<tr>
<td>Essential</td>
<td>5</td>
<td>71</td>
<td>82.6%</td>
</tr>
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Do you believe having access to recorded lectures will make a difference to your assessment marks?

<table>
<thead>
<tr>
<th>No difference</th>
<th>1 0 0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 1 1.2%</td>
<td></td>
</tr>
<tr>
<td>3 7 8.1%</td>
<td></td>
</tr>
<tr>
<td>4 23 26.7%</td>
<td></td>
</tr>
<tr>
<td>Significant improvement to marks</td>
<td>5 55 64%</td>
</tr>
</tbody>
</table>

Do you believe having access to recorded lectures will make a difference to your assessment marks?
“Makes it much more accessible and I feel more included and a valued member of the university.”
“Completely transforms how I'm able to learn”
“This has genuinely been perhaps the most important help from the entire DASS experience ”
“NEVER GET RID OF PODCASTS I WOULD FAIL WITHOUT THEM”
Opt-out Rate Over Time

- Opted-out %

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Opted-out %</th>
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</thead>
<tbody>
<tr>
<td>2013/14</td>
<td>36</td>
</tr>
<tr>
<td>2014/15</td>
<td>24.5</td>
</tr>
<tr>
<td>2015/16</td>
<td>22.1</td>
</tr>
<tr>
<td>2016/17</td>
<td>18.9</td>
</tr>
<tr>
<td>2017/18</td>
<td>14.6</td>
</tr>
<tr>
<td>2018/19</td>
<td>11.7</td>
</tr>
</tbody>
</table>
Opt-out Rate by School 2018/19

University Average
11.7

- SALC: 15.5
- Law: 15.5
- AMBS: 15.5
- SSS: 16.7
- SEED: 23.1
- Comp Sci.: 5.9
- Maths: 5.2
- Med Sci.: 4.1
- E&E: 3.2
- Phys & Astro.: 1.9
- Health Sci.: 1.8
- Bio Sci.: 1.4
- Chemical Eng.: 1.2
- EEE: 0
- Chemistry: 0
- MACE: 0
- Materials: 0

Opt-out Rate by School 2018/19
Change in Opt-out Rate by School
2017 vs 2018
(negative = improvement)
Current System Configuration

Admin  Ingest  Worker  Present  File  Ops

Admin  Ingest  Worker  Present  File  Ops
Application
Different Use-cases

University of Keele
100 Rooms
300 Recordings per week
~ 2 Staff

University of Manchester
362 Rooms
2,700+ Recordings per week
~ 6 Staff

SWITCH
National Provision (Switzerland)
Largest service offered by SWITCH
More than 47 Universities
SWITCHcast Overview

Admin / Enduser (Producer)

Enduser (Producer)

Enduser (Consumer)
Full costs per h of video

-> By 1.1.19 e.g., this allowed to include 20% more hours per tariff stage
47 tenants configured (approx. 60K events)
2 have more than 10,000 events
3 have 1000-10,000 events
13 have 100-1,000 events
9 have < 100 events
16 ready-to-be-used
4 for testing purposes

14 External API Integrations
5x Moodle (UniL)
1x Moodle (TU Ilmenau/WWW Münster)
4x ILIAS (UniBE)
3x OLAT (UZH)
1x Other
uPortal Integration - OAIPMH

/oaipmh?verb=GetRecord&metadataPrefix=matterhorn&identifier=<mediapackage_id>

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  <series>series_id</series>
  <seriestitle>My Series Title</seriestitle>
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  <metadata>...</metadata>
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uPortal Integration - OAIPMH

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    <tag>rss</tag>
  </tags>
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  </audio>
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    <framerate>10.0</framerate>
    <resolution>1280x720</resolution>
  </video>
</track>
Contacts

Opencast Users
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Opencast Developers
dev@opencast.org

More Opencast
https://opencast.org/communication

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Sven Stauber (SWITCH)
sven.stauber@switch.ch
Links

Opencast GitHub
https://github.com/opencast/opencast

Opencast 2019 Conference Videos
https://www.video.ethz.ch/events/opencast/2019/zurich.html

University of Manchester
https://www.mypodcasts.manchester.ac.uk

Our Public Repos
https://bitbucket.org/stuartphillipson/
https://github.com/UoM-Podcast
Questions?
NOTE TO TRANSLATOR

All slides after this page are only included to answer questions in the Q&A, should they come up. They are optional and may not be used at all.
In Numbers

![Graph showing expected and actual occupancy percentages from 2007 to 2016. The graph has lines for expected occupancy (blue), actual occupancy (green), and percentage recorded (yellow). The years and occupancy percentages are indicated on the graph.]
So hopefully most of you know by now, that I’m Stuart Phillipson and I work for the University of Manchester. And I largely run lecture capture here. Erm, so what I want to talk about briefly, and I talk far too quickly but if you are watching this on the recording there’s a little 1x button beneath on the player line and you can slow me down a bit. Everyone else in the room will just have to put up with it. Erm, so what I want to talk about is timetable integration, because it was sort of the be-all and end-all for us in terms of lecture capture. There’s absolutely, well I thought at the time there was absolutely no way we could do lecture capture at this scale without timetable integration.
So I have faith less you know by now. But I'm still Philipson and I work for the investment seven I. Lost me when lex captain here that. So I want to talk about briefly and I took far too quickly but if you're watching this on the recording has a little one next button beneath on the plan like you can slow me down a bit. I would also remove just have to put up with it. And so I once took my timetable integration because it was so the be all and end all for us in terms of like to capture this absolutely up what I thought at the time there is absolutely no way. We could do you like to catch.
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Medical Simulations
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