media for you, by you

Closed Captioning for Access
Why Public Media Network is Exploring Closed Captioning

Accessibility

• Hard of Hearing
• Spanish Language Speaking Community
• Searchable meetings
• Caption for live broadcast across platforms
• Caption for video on demand

Strategic Goal to provide closed captioning for at least 50% of our programming by 2023.
Goals for Public Media Network Captioning Test

24x7 Live Captioning – 2 of 5 channels
Mix of programming types
Mix of live and pre-recorded
Explore automated caption workflows
Understand impact on time, costs, benefits
Approach for trial captioning

Partnered with TelVue to pilot test TelVue SmartCaption Live
(provides our playback server, mobile, and OTT apps)
24x7 Smart Mode

Auto captions unique programming only

Scheduled files captioned offline in advance

Live events without captions are captioned live

Limits usage to unique programming hours for 24x7 captioning
Live Captioning Sources

Worked across our video sources:

SDI, IP, AJA Kumo Video Router
Streaming sources (RTMP)
Social Media (Facebook Live, YouTube)
LiveU, Zoom
Automated Captioning, Existing Captions

Files with embedded 608/708 played captions
• Auto detected & extracted as side car file

Attach sidecar captions to a file

Auto generated captioning for files attached to content

Auto generated captions for live recorded files
Automated Captioning, Existing Captions

Generated caption files in any case we tested:

- Displayed on cable channels
- Displayed on live streams
- Displayed on TelVue VOD / OTT / Mobile
- Embedded as 608/708 for sharing
## Custom Language Models

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Language</th>
<th>Default</th>
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<tr>
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<td>English</td>
<td>✔️</td>
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<td>English</td>
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</tr>
<tr>
<td>Kalamazoo Public Schools</td>
<td>Complete</td>
<td>English</td>
<td></td>
</tr>
</tbody>
</table>
LIVE Caption Automation – Per Live Source, Series, Events

Easy set-up:
• Custom language model
• Source language
• Automation settings

Set & Forget
Monitoring

(191) PMN Five
Next Gap: about 3 hours

Chuck Bentley presents / Chuck...
02:32:25

A World of Difference / The Am...
11:32:25 - 12:05:20
03/25/22

Dashboard displayed captioning

CC icons to indicate captions on programs
Captioning & Content Management

- Icon to see what is captioned
- Ability to trigger caption generation
- Previews show captions
- Trimming preserved captions
- Captions follow for VOD publishing
This is the public meeting of the Kalamazoo Public Schools.

Kalamazoo Public Schools - March 17, 2022
Kalamazoo Public School Board meeting

Updated about 3 hours ago

00:02:41
This is the public meeting of the Kalamazoo Public Schools.

00:14:12
will be no further changes or movements between schools.

00:15:04
Last Wednesday, each of our elementary schools held a morning,
schools to hear from the principal.

00:15:32
Our award-winning Loy Norrix High schools deck up professional business

00:18:46
Kalamazoo Public Schools is a vibrant district.
Esta es la reunión pública de las Escuelas Públicas de Kalamazoo.
Captions on our mobile iOS & Android Apps

Download on the App Store

GET IT ON Google Play

PMN Four - LIVE
Live Stream
Connect with your elected officials with gavel to gavel coverage of local government meetings. Coverage
Read More

Live TV (5 Videos)
Updated 3 years ago

PMN Five - LIVE
One issue is looking back and invoicing wages over this past year. And the separate issue is looking forward.
This is the public meeting of the Kalamazoo Public Schools,

On March 17th,

This is the public meeting of the board of education.

I like I said on March 17th at 7:02 PM.
Esta es la reunión pública de las Escuelas Públicas de Kalamazoo.

El 17 de marzo.

Esta es la reunión pública de las Escuelas Públicas de Kalamazoo.

Junta de Educación.

Me gusta lo que dije el 17 de marzo a las 7:02 p. m.
Daily Workflow
Tips for Accuracy with A.I. captioning

High Quality Audio Helpful
Use Custom Language Models at least for names, capitalization

Observations – Lessons Learned

Impressed with overall quality of AI captions with minimal effort

Worked well across different types of programming

Government partners really interested in searchable captions

Focus efforts with language models on names of elected officials, etc.
Getting Buy-In

ASSET
ALLOCATION
Next Steps

Evaluate set-up and ongoing costs of various systems

Budget set-up & on-going costs

- Estimate approx 4,000 hours/year of unique programs across all 5 channels

- **TelVue SmartCaption**: less than $2k per channel one-time licensing/setup

- Under $2.50/hour of AI captioning
Next Steps

Sponsorships for Captioning Costs

I'm very sorry to interrupt. My understanding is that if
media for you, by you

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