

Enabling the IIHS Vision, Part 1

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Peter Wilkins—Our colleague at MIT at 0° C

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2 Demos For January 2010

■ SpokenMedia

- Video/audio transcription, enabling translation
- Process and tools
- “Access to high-quality learning must be open to all”

■ Open IIHS Experience

- Course/activity design; student interaction
- “Make curriculum openly available”

*“The IHS Website is our
commitment to a different
way of looking at things.”*

*– Aromar Revi
5 January 2010*

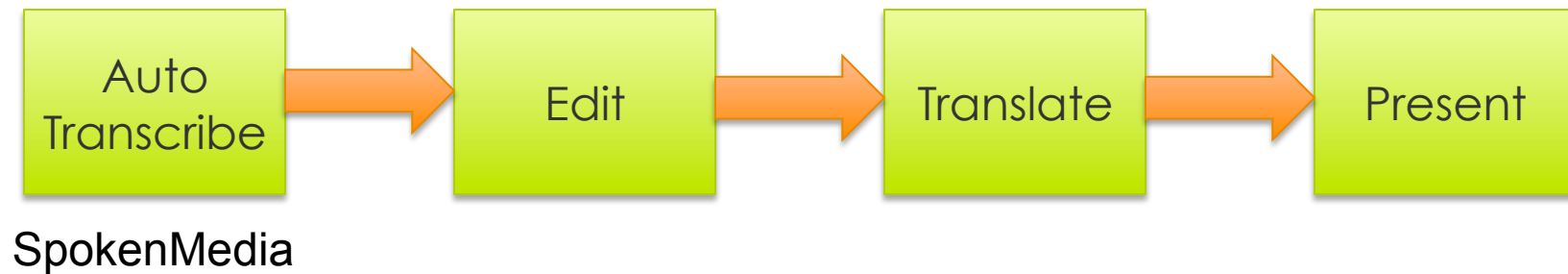
*“The Institution will fail or scale
based on language.”*

*– Aromar Revi
5 January 2010*

Our Goals with this Demo

- **Demonstrate transcripts and translations of IIHS videos**
- **Describe the process and our experiences**
 - Transcribe -> Edit -> Translate -> Present

What did we do?



Challenges of Planning, Critical Challenges facing Cities of Global South, IIHS, and Challenges within the IIHS Curriculum Framework

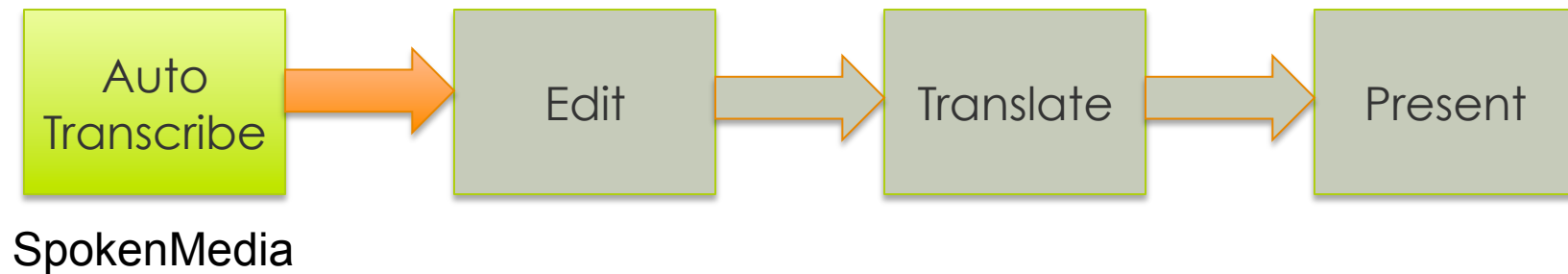


Prof. Bish Sanyal

I think one central challenge of planning is legitimacy of government as a key institution that should be involved in bringing the change The legitimacy of the government is under attack in many different parts of the world so that it has to be reestablished as a major planning institution I think the second challenge for planning at least in the US or the west is that the market is

Audio English (US) Transcript English (US)

How did we do it?



How do we do it?

Lecture Transcription

James Glass
glass@mit.edu



- Spoken Lecture: research project
- Speech recognition & automated transcription of lectures
- Why **lectures**?
 - Conversational, spontaneous, starts/stops
 - Different from broadcast news, other types of speech recognition
 - Specialized vocabularies

Spoken Lecture Project

James Glass
glass@mit.edu

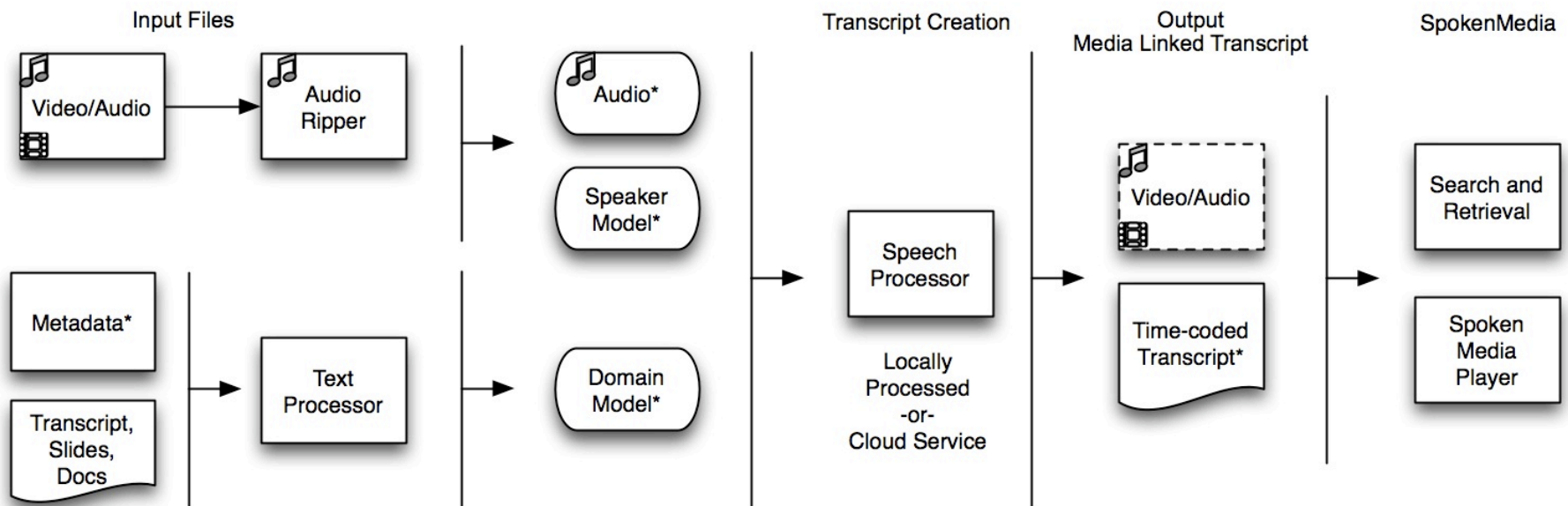


- **Processor, browser, workflow**
- Prototyped with lecture & seminar video
 - MIT OCW (~300 hours, lectures)
 - MIT World (~80 hours, seminar speakers)

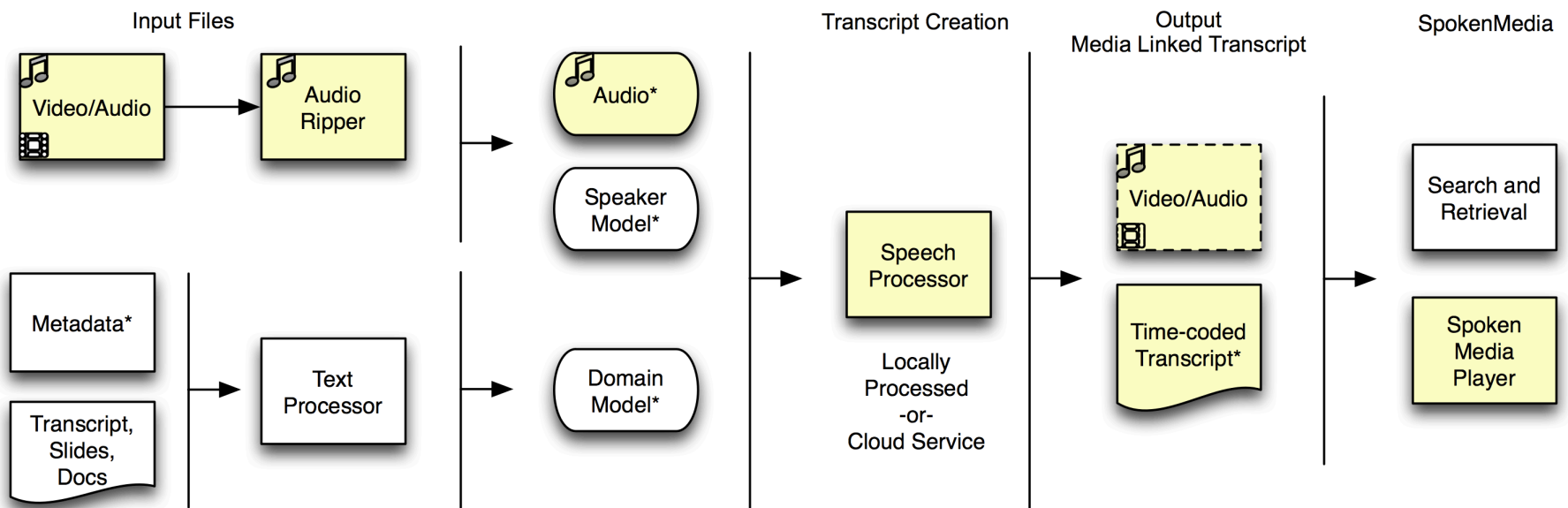
Supported with iCampus MIT/Microsoft Alliance funding

How Does it Work?

Lecture Transcription Workflow

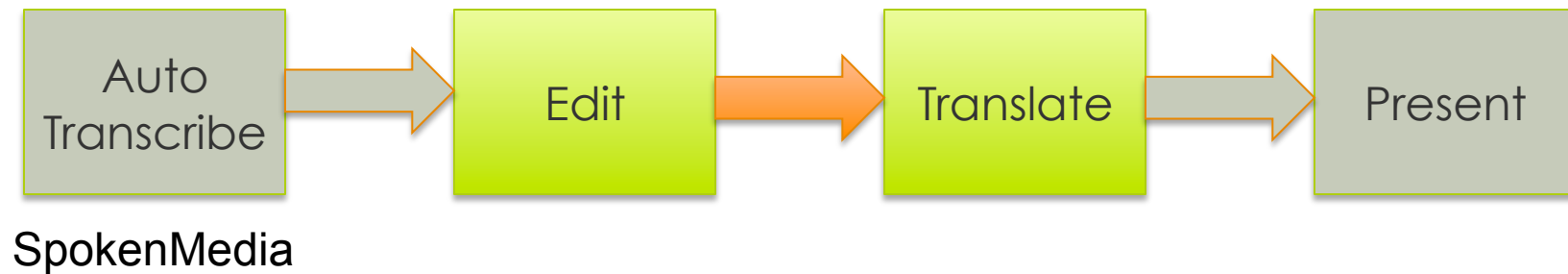


SpokenMedia Process



We used a portion of the SpokenMedia process for the demo

How did we do it?



Edit & Translate: Accuracy

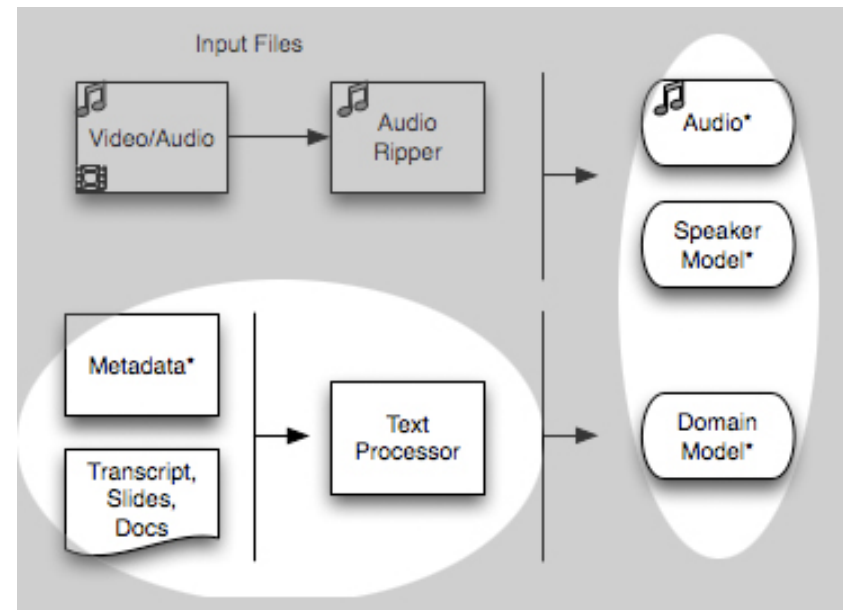
Automatic Transcription	Hand Transcription	Time Adjusted	Translated Hindi
I	I	I	मेरे खयाल से
think	think	think	
once	one	one	नयोजन की एक मुख्य चुनौती है
and	central		
so	challenge	central	
the	of		
challenger	planning	challenge of	
planning	is	planning	
nice	legitimacy	is	
legitimacy	of	legitimacy of	
of	government	government	सरकार की एक ऐसी मुख्य संस्थान के रूप में वैधता
government	as	as	

SpokenMedia Accuracy Potential

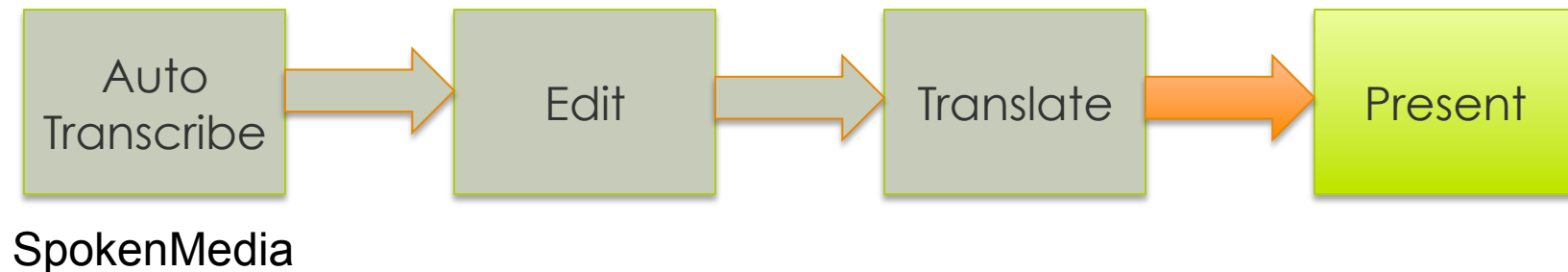
■ Accuracy

- Domain Model and Speaker Model
- Internal validity measure
- Seed with transcript

■ Ongoing research by Jim Glass and his team @ MIT



How did we do it?



Challenges of Planning, Critical Challenges facing Cities of Global South, IIHS, and Challenges within the IIHS Curriculum Framework



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Audio English (US) Transcript English (US)

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Check it out for yourself

▣ Demo site:

<http://oki-dev.mit.edu/spokenmedia>

all the videos from IIHS website...it's not just Bish!

Thank You!

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