

## 70e – Digital Humanities

### Action Item Template Response

#### General Action Item Information

Lead Division/Office: Research Technologies

Action Item Number: 70e

Action Item Short Name: Digital Humanities

Dependencies with other EP Action Items: 4, 36

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#### A. OVERVIEW

Indiana University has a strong history of leadership in the innovative application of IT to research and teaching in the humanities. Of specific note are efforts in the digitization and markup of rare texts from significant authors and scientists; the collection, annotation, and analysis of field video for studying ethnomusicology; and the digitization and delivery of digital music streams and scores for learning music history, composition, and analysis. As effective scholarship and education in the humanities are becoming increasingly reliant on these types of digital technologies, it is increasingly important to formalize support services and mechanisms around these activities, and to transition them from useful one-off projects to becoming part of common digital humanities infrastructure with a continuum of resources and services. In just the past two years, the new Institute for Digital Arts and Humanities (IDAH) has already made important steps towards coordinating existing support units around digital humanities research and providing a common point of contact; however, much more can and should be done to secure IU's position and reputation as a leader in the application of advanced IT to humanities research. The overall strategy involves building on our strengths with local researchers, expertise, and infrastructure, and also participating in and leading efforts to create a national cyberinfrastructure for the humanities.

#### I. DESCRIBE YOUR PLANS FOR IMPLEMENTING THIS ACTION.

To address the growing need for support in the digital humanities and to move IU to a position of national leadership, we propose the following strategy:

1. Create two new analyst positions to address emerging, data-intensive applications that fall in the gaps between existing support groups. (The formal affiliation of these individuals is TBD.)
  - a. A temporal data and media specialist to focus on the unique needs of managing and analyzing data of a temporal nature, including streams of audio, video, sensor data, and other telemetry data. This data results from studies in fields ranging from ethnomusicology to speech psychology to marketing, and often includes multiple, heterogeneous streams composed of discrete and continuous samples in a variety of formats that must be synchronized and effectively cross-referenced and cross-analyzed.
  - b. A humanities-oriented high-performance computing and data specialist to focus on the application of existing local and national HPC resources to specific

problems in the humanities, including high-throughput analyses of digital text, image, audio, and video collections, as well as cross-referencing and integration of data in various formats in distributed repositories.

2. Better leverage existing consulting resources and expertise within UITS and academic units.
  - a. Utilize geospatial data expertise in the Stat/Math group to help apply standard GIS practices and software tools to research groups and fields that do not normally use such tools or that do so in informal or ad-hoc ways. Also look to expand the expertise of this group to fully incorporate emerging publicly accessible technologies such as 2D and 3D web mapping tools.
  - b. Utilize information visualization expertise in the Advanced Visualization Lab as well as in the Schools of Informatics and Library and Information Science to apply established techniques and representations to problems of text and network analysis as well as the use of multiple coordinated views of standard reference systems (e.g., maps, timelines, tables, graphs, etc.)
3. Look to expand IDAH into a cross-campus program. While initially funded through IUB departments and administration, it is clear that the University as a whole will benefit from a digital arts and humanities support initiative that is coordinated and consistent across campuses. This would involve discussions with IDAH, OVPR, and administration at IUPUI and regional campuses. (Also referenced in item 70D.)
4. Participate in initiatives such as Project Bamboo to define common cyberinfrastructure resources, services, and funding models for the national humanities research community.

## **II. WHAT ARE THE POLICY AND PRACTICE IMPLICATIONS OF YOUR PLANS?**

- Plans to make better use of existing consulting resources will require effective cross-unit collaboration and a spirit of openness and sharing of staff beyond the high levels already common within UITS and RT.
- The objective of expanding IDAH to a cross-campus program will require some changes to existing policies and practices, as well as breaking down of real and perceived barriers between some campuses and support units.
- Participation in Project Bamboo and similar initiatives will require investments of IU resources into national initiatives with the hope and expectation that those resources will be recouped through future savings or increased grant funding to IU. This model is similar to that utilized in other cyberinfrastructure and community-source software initiatives in which IU is involved.

I.

II.

## **III. IDENTIFY STAKEHOLDERS.**

On the Bloomington campus, we will utilize IDAH as a means to communicate goals and gather input. In future years, if IDAH has expanded, we will work within its structure at other campuses; otherwise, we will seek to create forums in partnership with the libraries at IUPUI and the regional campuses.

- Academic Departments
  - English
  - Foreign Languages
  - Folklore and Ethnomusicology
  - Music
  - Film Studies
  - Media Arts & Sciences
  - History

- Anthropology
  - Archeology
  - Psychology
  - Sociology
- Administrative Units
  - IDAH
  - OVPR
- Digital Libraries programs at IUB & IUPUI