#### 1

### **CSCE-675 Digital Libraries: Daily Readings**

Krishna Y.Kamath (UIN: 119001316) kykamath@cs.tamu.edu Date: 20<sup>th</sup> January 2011

### I. As WE MAY THINK. [1]

### Details:

• Year: 1945

• Type: Article in The Atlantic

• Affiliations: MIT

### Take-away points:

- The author points out several key areas where the advances made during the war can be used.
- He suggests the knowledge acquired during the war years should be used in developing technologies that will help people to access knowledge gained during previous years.
- In photography he talks about advancements that could be made like clicking pictures that are available immediately, compression of images, etc.

### Questions to discuss

- Have there been similar papers written after this?
- What are the kind of technologies one would think of if he was to write a paper similar to this?

### II. AN OPEN ARCHITECTURE FOR A DIGITAL LIBRARY SYSTEM AND A PLAN FOR ITS DEVELOPMENT. [2]

### Details:

- Year: 1988
- Type: Article in The Digital Library Project, Volume 1: The World of Knowbots. (Washington, DC: Corporation for National Research Initiatives)
- Affiliations: Chairman, CEO and President of the Corporation for National Research Initiatives (CNRI); Vice President and Chief Internet Evangelist Google.

### Take-away points:

- The authors present an architecture for digital library systems.
- It is designed to allow organistations to share information with other organistations.
- They describe the various components that would be needed to support a digital library system.

### Questions to discuss

- This looks like a proposal. Did they build this system?
- Was this paper the reason behind the authors being called Fathers of Internet?
- Does items generated by online users like tweets, status messages, comments etc be considered as a part of digital library system?

# III. NSF/DARPA/NASA DIGITAL LIBRARIES INITIATIVE A PROGRAM MANAGER'S PERSPECTIVE [3]

### Details:

• Year: 1998

• Type: Article in D-Lib Magazine

• Affiliations: Program Director: Special Projects Digital Libraries Initiative

### Take-away points:

- The article gives a description of various initiatives in Digital libraries funded by NSF, DARPA and other government organisations.
- It uses the demand for high quality content and ease of access as the motivation that will drive the funding and development of digital libraries.
- It also gives a definition for digital libraries

### Questions to discuss

- Can we include the items generated by online users like tweets, status messages, comments etc be considered as a part of digital library system? How should we change this definition?
- How has the field changed in the 12 years since this article was written?

# IV. A NATIONAL DIGITAL LIBRARY FOR SCIENCE, MATHEMATICS, ENGINEERING, AND TECHNOLOGY EDUCATION [4]

#### Details:

• Year: 1998

• Type: Article in D-Lib Magazine

Affiliations: Division of Undergraduate Education, National Science Foundation; Mathematics Department Montana State University

### Take-away points:

- Describes how Internet is enabling people to contribute to online knowledge.
- Gives scenarious where users use digital libraries for their work
- Gives details of architecture that has been developed to support digital libraries.

### **Questions to discuss**

- What is the current state of this project?
- Do we need to build systems specific to these resources or does web serve as a platform in itself which users can use?

### REFERENCES

- [1] V. Bush, "As we may think." *The Atlantic Monthly*, vol. 176, no. 1, pp. 101–108, 1945. [Online]. Available: http://dblp.uni-trier.de/db/journals/theatlantic/theatlantic176.htmlBush45
- [2] R. E. Kahn and V. G. Cerf., "An open architecture for a digital library system and a plan for its development." *The Digital Library Project, Volume 1: The World of Knowbots. (Washington, DC: Corporation for National Research Initiatives*, 1988.
- [3] S. M. Griffin, "Nsf/darpa/nasa digital libraries initiative a program manager's perspective." *D-Lib Magazine*, 1998. [Online]. Available: http://www.dlib.org/dlib/july98/07griffin.html
- [4] F. Wattenberg, "A national digital library for science, mathematics, engineering, and technology education," *D-Lib Magazine*, 1998. [Online]. Available: http://www.dlib.org/dlib/october98/wattenberg/10wattenberg.htmlcontents