KISTI-ACOMS: ARTICLE CONTRIBUTION MANAGEMENT SYSTEM

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ABSTRACT

KISTI-ACOMS has been developed as a part of the national project for raising the information society index of academic societies that began in 2001. ACOMS automates almost every activity of academic societies, including membership management, journal processing, conference organization, and e-journal management and provides a search system. ACOMS can be customized easily by the system administrator of an academic society. The electronic databases built by ACOMS are serviced to the users through the KISTI website (http://www.yeskisti.net) along with other journal databases created in a conventional way. KISTI plans to raise the usage ratio of the ACOMS database to deliver society services up to 100% in the future.

Keywords: Peer review system, Journal publication, KISTI-ACOMS, Society informationalization

1 INTRODUCTION

KISTI-ACOMS (Jeong, 2005) is a web-based paper submission and peer-review system (Ware, 2005). It has been developed as a part of the national project for raising the information society index of academic societies in Korea that began in 2001. The latest version of KISTI-ACOMS, ACOMS ver. 2.0, was released last year. It was developed based on more than 300 requirements from many academic societies to meet their users' needs. ACOMS automates almost every activity of academic societies including membership management, journal processing, conference organization, and e-journal management as well as provides a search system. For the journal publishing process, ACOMS automates the whole process from the paper submission to peer review to the publishing of the journal and updating the journal database. This can help a society not only to build their electronic journal database but also to maintain their records of peer reviews. ACOMS also provides the function to check for similar papers based on the huge journal database in KISTI and contains an English interface with which to publish international journals. The conference management module has functions that create new conferences, a paper submission and peer review process, pre-registration, conference statistics, and other managerial functions for organizing a conference.

ACOMS can be customized easily by the system administrator of an academic society. The system administrator can set up the initial variables such as membership categories, membership fee, organization of the society, and a journal publishing process.

2 STRUCTURE



Figure 1. Structure of KISTI-ACOMS

Figure 1 shows the structure of ACOMS. ACOMS is largely made up of a Journal Publishing module and a Conference Management module. Each module has two interfaces. One is for managers (system administrators, staff), and the other is for users (authors, reviewers, editors, editor-in-chief).

- For the journal publishing process, ACOMS supports the whole process from paper submission
 to peer review to the publishing of the journal and updating the journal database. Publishers can
 access the electronic journal database to upload the final PDFs of to-be-published papers and
 maintain the database optionally on academic societies' requests. This can help a society not
 only to build their electronic journal database but also to maintain their record of peer reviews.
- The Conference Management module consists of a conference guide, simple paper review, paper submission, pre-registration, and a search system. System administrators create and organize a conference page for each conference hosted by their societies.

3 CHARACTERISTICS

In the following, the characteristics of KISTI-ACOMS are described in detail.

3.1 Flexibility

Academic societies have their own environments, such as contribution regulations, review process, fee policy, which differ from society to society. ACOMS has been developed based on more than 300 requirements from many academic societies. A Society's environment can be adjusted via configuration

pages in ACOMS. Therefore, the structure can be easily customized by the system administrator of an academic society. The system administrator can set up the initial variables such as membership categories, membership fee, organization of the society, and journal publishing process. For example, Figure 2 shows one configuration page. By selecting proper values, most societies can use ACOMS without any further hard-coded customization.



Figure 2. A configuration page in ACOMS

3.2 Searching Similar Papers

In ACOMS, paper reviewers can search for papers similar to a submitted paper based on the huge journal database (about 430,000 articles) in KISTI. As in Figure 3, when reviewing a paper, a reviewer can search for papers similar to a submitted paper (①) with just one click. And then he (or she) can view a similar paper in detail (②), including the full text in PDF (③). This can greatly help a reviewer to examine related work and inspect important findings of a submitted paper.

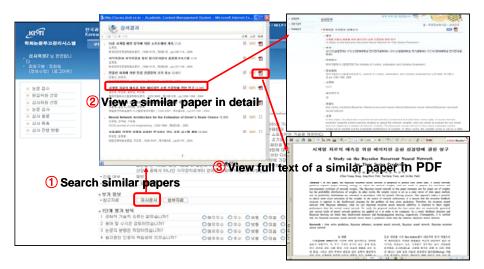


Figure 3. Searching Similar Papers in ACOMS

3.3 English Interface

KISTI-ACOMS provides an English interface available to foreign contributors, editors, reviewers for international journals, and conferences. For example, Figure 4 shows the international conference page hosted by the Korea Multimedia Society. Currently, the English interface of ACOMS is limited to interfaces for users (authors, reviewers, editors, editor-in-chief), not for managers (system administrators, staff). We plan to support multiple languages including interfaces for managers in the near future.

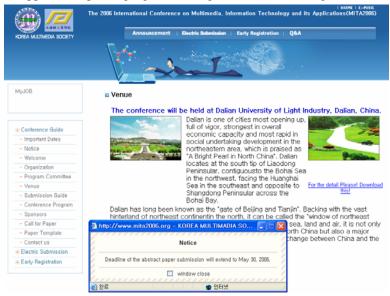


Figure 4. An International Conference Page

3.4 Preprinting Service

With the ACOMS preprinting service, members of an academic society can examine in advance cameraready-papers to be published (Figure 5). This allows academic information to be disseminated more quickly.

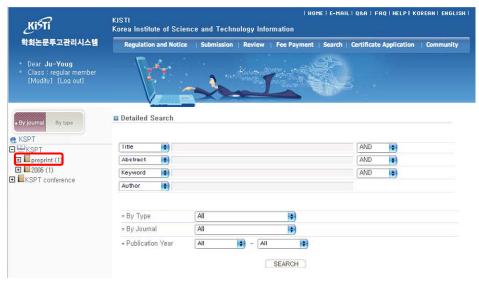


Figure 5. Preprinting Service

In addition, ACOMS sends e-mail and SMS text messages automatically for the important events in the process of paper submission and review.

4 CONCLUSION

ACOMS automates almost every activity of academic societies including membership management, journal processing, conference organization, and e-journal management as well as provides a search system. It was developed based on more than 300 requirements from many academic societies and can be customized easily by the system administrator of an academic society to meet the users' needs. Since 2001, ACOMS has been distributed to 231 academic societies free of charge by KISTI. The electronic databases built by ACOMS are serviced to the users through the KISTI website (http://www.yeskisti.net) along with other journal databases created in a conventional way. KISTI plans to raise the usage ratio of the ACOMS database to deliver society services up to 100% in the future.

5 REFERENCES

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