Korea Institute of Science and Technology Information’s scholarly journal publishing: A case study

Hea Lim Rhee

Key points
- The relationship between the Korea Institute of Science and Technology Information (KISTI) and Journal of Information Science Theory and Practice (JISTaP) enables both to benefit from the other.
- KISTI is able to test new systems with its own journal, JISTaP.
- JISTaP benefits from both financial and technical support of its parent, although this can restrict its ability to make changes and use alternative technologies.

INTRODUCTION

Korea has a long tradition of respect for scholarship. Scholarly publishing is one way Korea seeks to disseminate and accumulate knowledge, create new knowledge, and enhance national research and development (R&D).

Commercial companies lead the scholarly publishing environment in the UK and USA, but in Korea, most scholarly journals are published by discipline-based scholarly societies and research institutes affiliated to universities (Joung & Rowley, 2017, p. 259). National government research institutes, such as Korea Institute of Science and Technology Information (KISTI) and Korea Education and Research Information Service (KERIS), and commercial full-text database service aggregators, such as Nurimedia and Korean Studies Information, lead the Internet distribution and archiving of journal articles (Hong, 2008, p. 432).

However, there is little literature about Korean scholarly journals published by national research institutes. The literature that does exist is mainly about how to get journals into the Science Citation Index (SCI). For example, Yu (2001) wrote about how to increase Korean academic journals’ inclusion in the SCI by analysing the Journal of the Korean Nuclear Society published by his institute, Korea Atomic Energy Research Institute, as a case study. Yi’s study (1998) and Oh, Yeo, and Park’s study (2015) discussed ETRI Journal’s inclusion in the SCI. Yi (1998) worked for the Electronics and Telecommunications Research Institute (ETRI) as Editor-in-Chief of ETRI Journal and described ETRI’s process of getting the journal included in SCI. Oh et al. (2015) analysed how ETRI succeeded from an external perspective.

KISTI is not only a government-funded research institute but also an information service provider. KISTI is ‘the government’s main information service institution for science and technology’ (Joung & Rowley, 2017, p. 264). It also plays a role in building and managing R&D infrastructure for science and technology. Moreover, KISTI has developed and delivered information infrastructures for Korean journal publishing and access. There are 25 national research institutes of Korea in the science and technology field. Only six, including KISTI, publish institutional journals, and all of them publish an international edition in English. Since 2013, KISTI has published the scholarly Journal of Information Science Theory and Practice (JISTaP). In 2017, JISTaP was accepted to be included in Scopus, the largest database of peer reviewed literature. It is the first Korean journal on information science to be included.

This paper describes how KISTI, as a research institute of information science, applies its human resources, budget, and information technology infrastructures to publish, archive, and distribute JISTaP and how KISTI affects JISTaP’s development opportunities and constraints. It shows how institutional infrastructures can enable effective journal publishing. It also shows...
the unique synergy between JISTaP and KISTI. KISTI helps
Korean scholarly journals be published, distributed, used, and
reused. The way KISTI applies its resources to publish JISTaP is
an instructive example for other Korean publishers.

WHY KISTI PUBLISHES JISTAP

KISTI is a government-funded research institute providing science
and technology information services. Its mission is to promote
Korean national science and technology. To support this mission,
KISTI:

- Collects, analyses, and synthesizes information on science and
technology.
- Researches technologies, policies, and standards about infor-
mation management and distribution.
- Systematically builds and manages R&D infrastructures of sci-
cence and industrial technology.

KISTI houses three research divisions: Division of National
Science & Technology Data, Division of National Supercomput-
ing, and Division of Data Analysis.

Through its Scholarly Information Sharing project, KISTI helps
Korean scholarly societies publish their journals. KISTI also helps
make those journals accessible to and usable by a broad range of
researchers.

KISTI also published its own institutional journal, the Journal
of Information Management (JIM), from 1963 to 2012. JIM was a
domestic journal dealing with theories, policies, practices, and
cases relevant to information management. Many of its articles
were practical rather than theoretical.

In 2011, KISTI decided to publish an international, academic
journal for seven reasons: (1) to exemplify the internationalization
of a Korean journal to other Korean scholarly publishers; (2) to
model how to publish an electronic journal and to model open
access (OA) publishing; (3) to test KISTI’s publishing systems on
an actual journal; (4) to present good practices to Korean scholar-
ly publishers; (5) to contribute to the field of global science and
technology information by collecting, managing, and distributing
high-quality papers; (6) to provide a place for international
scholarly communication; and (7) to enhance KISTI’s reputation in
the world.

In 2012, KISTI formed the JISTaP project team, which reviewed the successful internationalization of domestic journals,
established its own internationalization strategies, and set up a
long-term plan for JISTaP. KISTI launched JISTaP in 2013.

KISTI intended JISTaP to be a forum for the field and publish
a broad variety of research topics on information science: biblio-
metrics, human–computer interaction, records management,
metadata, information retrieval, information seeking, information
systems, information policies, user studies, and scholarly
communication.

JISTaP publishes invited papers, research papers, review
papers, and technical reports on information science theory and
practice. The editorial board determines these types without KIS-
TI’s influence. Table 1 breaks down the types of papers published
in JISTaP from 2013 (volume 1, issue 1) to 2017 (volume 5, issue
4). Every year, the journal publishes one volume of four issues.
Each issue includes five or six papers.

KISTI’S HUMAN RESOURCES AND JISTAP

KISTI researchers have diverse academic backgrounds, including
computer science (CS), chemistry, physics, informatics, brain sci-
ence, and library and information science (LIS). The majority have
backgrounds in CS and LIS, and many have doctoral degrees.
These experts enable KISTI to keep up with and adopt fast-
developing trends in publishing: digital object identifier (DOI),
OA, electronic submission systems, quick response (QR) codes,
and others.

Many KISTI employees are qualified to be authors, reviewers,
or editors of JISTaP, and in fact, many are involved with the jour-
nal. They often use their social and professional networks to
involve international researchers and further JISTaP’s
internationalization.

KISTI directed that the editorial board include international
researchers. KISTI appointed two editors-in-chief, one associate
editor, and two managing editors. The editorial staff, with KISTI’s
consent, formed an editorial board. Over time, the editorial board
has become more internationalized. Starting with 27 editors in
8 countries, it has grown to 38 editors from 5 continents (Africa,

| Table 1 | Number of types of papers published in JISTaP. |
|---------|-----------------------------------------------|
|         | Vol. 1 (2013) | Vol. 2 (2014) | Vol. 3 (2015) | Vol. 4 (2016) | Vol. 5 (2017) | Total |
| Research paper | 14          | 18          | 15          | 17          | 17          | 81    |
| Invited paper   | 4           | 1           | 3           | 2           | 2           | 12    |
| Technical report    | 2           | 1           | 1           | 1           | 1           | 6     |
| Review paper     | 1           | 0           | 1           | 0           | 0           | 2     |
| Brief survey report | 1          | 0           | 0           | 0           | 0           | 1     |
| Total            | 22          | 20          | 20          | 20          | 20          | 102   |
America, Asia, Europe, and Australia) and 14 countries (Australia, Austria, Canada, China, Denmark, Germany, India, Japan, Korea, Lebanon, Singapore, South Africa, Thailand, and the USA).

**JISTaP** has been promoted internationally through KISTI’s relationships with international institutions, through memoranda of understanding (MOU) and partnership, and through KISTI researchers’ and **JISTaP** editors’ international networks. **JISTaP** editors also use their social and professional networks to solicit many manuscripts by international researchers.

From 2013 to 2017, **JISTaP** published 209 primary authors and co-authors from 25 countries (see Table 2).

KISTI encourages its researchers to submit to **JISTaP** by acknowledging submissions as a research achievement. Twenty-four KISTI researchers have published, alone or together, nine papers in volumes 1–5 of **JISTaP**. Three of those nine papers were written in collaboration with researchers from other institutions. **JISTaP**’s editorial review process does not give any special priority or consideration to papers submitted by KISTI researchers, and they are never reviewed by other KISTI researchers.

**JISTaP** is a fast-track, peer-reviewed journal. Most (67.5%) **JISTaP** manuscript reviewers have been non-Korean scholars (see Table 3). Over time, their countries of origin have become more diverse.

**KISTI’S FINANCIAL BACKING OF JISTAP**

Many Korean scholarly societies that publish are in poor financial health. Their revenues include yearly membership fees, manuscript review charges, and article processing charges (APC). Authors whose papers are accepted by these societies are

---

**TABLE 2** **JISTaP** authors and co-authors by country and year.

| Country       | 2013 Freq. | 2013 Prop. (%) | 2014 Freq. | 2014 Prop. (%) | 2015 Freq. | 2015 Prop. (%) | 2016 Freq. | 2016 Prop. (%) | 2017 Freq. | 2017 Prop. (%) | Total Freq. | Total Prop. (%) |
|---------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|-------------|-----------------|
| India         | 12         | 26.7           | 13         | 31.7           | 12         | 29.3           | 9          | 22             | 5          | 12.2           | 51          | 24.4            |
| Korea         | 16         | 35.6           | 10         | 24.4           | 8          | 19.5           | 2          | 4.9            | 13         | 31.7           | 49          | 23.4            |
| USA           | 7          | 15.6           | 5          | 12.2           | 5          | 12.2           | 4          | 9.8            | 1          | 2.4            | 22          | 10.5            |
| Nigeria       | 0          | 0              | 4          | 9.8            | 3          | 7.3            | 10         | 24.4           | 5          | 12.2           | 22          | 10.5            |
| Germany       | 0          | 0              | 0          | 0              | 8          | 19.5           | 3          | 7.3            | 4          | 9.8            | 15          | 7.2             |
| Singapore     | 4          | 8.9            | 0          | 0              | 2          | 4.9            | 0          | 0              | 0          | 0              | 10          | 4.8             |
| Botswana      | 4          | 8.9            | 0          | 0              | 0          | 0              | 3          | 7.3            | 0          | 0              | 7           | 3.3             |
| Malaysia      | 0          | 0              | 5          | 12.2           | 0          | 0              | 0          | 0              | 0          | 0              | 5           | 2.4             |
| Bangladesh    | 0          | 0              | 0          | 0              | 2          | 4.9            | 1          | 2.4            | 2          | 4.9            | 5           | 2.4             |
| Iran          | 0          | 0              | 0          | 0              | 0          | 0              | 3          | 7.3            | 0          | 0              | 3           | 1.4             |
| Pakistan      | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 2          | 4.9            | 3           | 1.4             |
| Australia     | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 1          | 2.4            | 2           | 1.0             |
| China         | 0          | 0              | 2          | 4.9            | 0          | 0              | 0          | 0              | 0          | 0              | 2           | 1.0             |
| Denmark       | 1          | 2.2            | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 2           | 1.0             |
| South Africa  | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 0          | 0              | 1           | 0.5             |
| Brazil        | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 0          | 0              | 1           | 0.5             |
| Japan         | 0          | 0              | 1          | 2.4            | 0          | 0              | 0          | 0              | 0          | 0              | 1           | 0.5             |
| New Zealand   | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 1           | 0.5             |
| Belgium       | 1          | 2.2            | 0          | 0              | 0          | 0              | 0          | 0              | 0          | 0              | 1           | 0.5             |
| Thailand      | 0          | 0              | 1          | 2.4            | 0          | 0              | 0          | 0              | 0          | 0              | 1           | 0.5             |
| Taiwan        | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 1           | 0.5             |
| Philippines   | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 1           | 0.5             |
| Finland       | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 1           | 0.5             |
| UK            | 0          | 0              | 0          | 0              | 0          | 0              | 1          | 2.4            | 0          | 0              | 1           | 0.5             |
| Total         | 45         | 100            | 41         | 100            | 41         | 100            | 41         | 100            | 41         | 100            | 209         | 100             |

**JISTaP**, *Journal of Information Science Theory and Practice*. 
required to pay for their manuscript review and their article processing. However, the societies usually do not identify how much charges are. Many Korean scholarly societies also give the full text of their articles to commercial full-text database service aggregators such as Nurimedia. Those aggregators sell the databases to libraries and pay copyright fees back to the contributing societies.

### Table 3: Reviewers by country and year.

|        | 2013\(^a\) | 2014\(^a\) | 2015\(^a\) | 2016\(^b\) | 2017\(^b\) | Total |
|--------|-------------|-------------|-------------|-------------|-------------|-------|
|        | Freq. Prop. (%) | Freq. Prop. (%) | Freq. Prop. (%) | Freq. Prop. (%) | Freq. Prop. (%) | Freq. Prop. (%) |
| Korea  | 21 37.5 | 17 35.4 | 14 25.5 | 16 30.8 | 15 34.1 | 83 32.5 |
| India  | 9 16.1 | 11 22.9 | 16 29.1 | 9 17.3 | 8 18.2 | 53 20.8 |
| USA    | 5 8.9 | 10 20.8 | 9 16.4 | 7 13.5 | 4 9.1 | 35 13.7 |
| China  | 0 0 | 2 4.1 | 6 10.9 | 5 9.6 | 1 2.3 | 14 5.5 |
| Singapore | 1 1.8 | 1 2.1 | 1 1.8 | 3 5.8 | 1 2.3 | 7 2.7 |
| Argentina | 0 0 | 1 2.1 | 1 1.8 | 1 1.9 | 0 0 | 3 1.2 |
| Malaysia | 0 0 | 1 2.1 | 2 3.6 | 0 0 | 0 0 | 3 1.2 |
| Nigeria | 0 0 | 1 2.1 | 0 0 | 2 3.8 | 2 4.5 | 5 2 |
| Thailand | 0 0 | 1 2.1 | 2 3.6 | 0 0 | 1 2.3 | 4 1.6 |
| Taiwan | 0 0 | 1 2.1 | 1 1.8 | 1 1.9 | 0 0 | 3 1.2 |
| Germany | 0 0 | 0 0 | 0 0 | 2 3.8 | 0 0 | 2 0.8 |
| Lebanon | 0 0 | 1 2.1 | 1 2 | 0 0 | 0 0 | 2 0.8 |
| Australia | 0 0 | 0 0 | 1 2 | 0 0 | 1 2.3 | 2 0.8 |
| Brazil | 0 0 | 0 0 | 0 0 | 1 1.9 | 0 0 | 1 0.4 |
| Canada | 0 0 | 1 2.1 | 0 0 | 0 0 | 0 0 | 1 0.4 |
| England | 0 0 | 0 0 | 1 3.6 | 0 0 | 0 0 | 1 0.4 |
| Greece | 0 0 | 0 0 | 0 0 | 1 1.9 | 0 0 | 1 0.4 |
| Iran | 0 0 | 0 0 | 0 0 | 1 1.9 | 0 0 | 1 0.4 |
| Slovenia | 0 0 | 0 0 | 0 0 | 1 1.9 | 0 0 | 1 0.4 |
| Turkey | 0 0 | 0 0 | 0 0 | 1 1.9 | 0 0 | 1 0.4 |
| United Arab Emirates | 0 0 | 0 0 | 0 0 | 1 1.9 | 0 0 | 1 0.4 |
| Netherlands | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Bangladesh | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Finland | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Ghana | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Greece | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Japan | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Malaysia | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Myanmar | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Pakistan | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Philippines | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| South Africa | 0 0 | 0 0 | 0 0 | 0 0 | 1 2.3 | 1 0.4 |
| Unknown | 20 35.7 | 0 0 | 0 0 | 0 0 | 0 2.3 | 20 7.8 |
| Total | 56 100 | 48 100 | 55 100 | 52 100 | 44 100 | 255 100 |

\(^a\) Determined on 31 October each year.

\(^b\) Determined on 10 November each year.
KISTI’s scholarly journal publishing

KISTI, which is funded by the national government, does not follow this business model.

Because it is a government-funded research and information institute, KISTI pays all the journal costs: there is no APC to authors, and JISTaP is a gold OA journal. With no-fee, OA publishing, JISTaP seeks to ‘ensure rapid dissemination and communication of scholarly works that make significant contributions’ (Korea Institute of Science and Technology Information [KISTI], 2018a).

KISTI introduced the concept of OA to the Korean community. It has actively participated in Open Access Korea (OAK), an alliance leading OA to and sharing of knowledge and information. Furthermore, KISTI is one of four Korean institutions that participate in OA2020, ‘a global alliance committed to accelerating the transition to open access’ (OA2020, 2018). The publication of KISTI’s institutional journal as OA aligns with the institute’s mission. With JISTaP, KISTI can present a real example of an OA journal to the Korean scholarly journal publishers.

KISTI’s financial backing also allows JISTaP’s editors to attend international conferences where they can meet international researchers and solicit their participation. JISTaP also invites the contributions of world-renowned scholars and often gives them an honorarium out of KISTI’s budget.

JISTaP is published online and in print. KISTI pays all typesetting, printing, and distribution costs. From 2013 to 2015, approximately 500 promotional copies per issue were printed and distributed to authors, editorial board members, reviewers, national libraries, universities, and institutions related to KISTI across many countries. However, because of cuts to KISTI’s budget in 2016 and 2017, only 70 volumes of JISTaP per issue were printed in those years. Only authors, a few editorial board members, and a few KISTI researchers who were on the editorial board received the English copy-editing by a university professor and native speaker of English. This service, offered free of charge to authors, enhances the quality of published articles and encourages submissions from authors whose first language is not English. This free service may be one reason that non-native English authors submit to JISTaP multiple times.

KISTI pays JISTaP’s membership fees for many publishing organizations, such as the Association of Learned & Professional Society Publishers (ALPSP), Committee on Publication Ethics (COPE), and Directory of Access Journals (DOAJ).

Because KISTI is a sponsoring member of CrossRef, JISTaP has free use of CrossRef’s CrossCheck service, which includes Turnitin’s iThenticate software, to check manuscripts for plagiarism.

KISTI’S TECHNOLOGY INFRASTRUCTURE AND JISTAP

KISTI has up-to-date technological facilities, such as five supercomputers. KISTI uses its technology assets to develop and distribute free systems, databases, and platforms for journal publishing, archiving, and dissemination.

Electronic submission system: ACOMS

KISTI has developed the Article Contribution Management System (ACOMS), an electronic submission system, to support Korean journal publishers. ACOMS 1.0 through ACOMS 3.0 were for journals written in Korean. As many Korean scholarly societies in science and technology have internationalized their journals, they have paid large fees to major Korean and foreign publishing companies to use their expensive, English-version, electronic submission systems. In response, KISTI developed ACOMS 4.0, an English version, and allows Korean scholarly societies to use it for free. KISTI also teaches how to use and manage ACOMS 4.0.

Before JISTaP launched in 2012, nearly 50 journals of 14 Korean scholarly societies already used ACOMS 4.0. One reason KISTI published JISTaP was to test and improve ACOMS 4.0, and it can be said that the two have developed together. JISTaP has always used ACOMS 4.0, despite the availability of other free submission systems, and JISTaP staff members, co-editors-in-chief, editors, authors, contributors, and reviewers have reported many errors and problems in the system. As a result, the ACOMS system has been much improved, and the number of journals using it increased to 90 in 2017. KISTI intends to allow not only Korean journals to use ACOMS but also other countries’ journals.

Korean Journal Publishing Service

In 2013, KISTI developed Korean Journal Publishing Service (KPubS), ‘a scholarly open access journal publishing platform’ that purports to provide ‘a full-cycle publishing service, supporting each stage of [the] publication process (manuscript management, archiving, web service, and international circulation)’ (KISTI, 2018d). It also intends to enhance a weak Korean publishing and distribution environment and maximize the value of Korean journals.

The development of KPubS is ongoing. Currently, KPubS focuses on creating XML versions of articles, which it then publishes as HTML, ePub, PDF, and PubMed. It does not link with ACOMS, National Digital Science Library (NDSL), or Online Coordinator for E-Association Network (OCEAN) (NDSL and OCEAN will be described below). Integration with ACOMS would make KPubS a true full-cycle publishing platform. At present, JISTaP uses KPubS to create full-text XML of its articles that are published on the site in the different formats. It will take time for KISTI to fully develop KPubS so that it can play its role more effectively. As KPubS progresses, JISTaP staff members will likely consider using more of its functions.

Currently, KISTI is developing a website for the KPubS–ACOMS submission and review management system; see the demonstration site at http://acoms.kist.re.kr/home.do?method= demoIntro. ACOMS 4.0 is in English, and links to JISTaP go to the English-language JISTap homepage. KPubS staff members should reconsider who the target users of the KPubS–ACOMS...
submission website are, the purpose of the website, and which language is the most proper for it.

**Online Coordinator for E-Association Network**

KISTI's OCEAN collects and processes scholarly materials provided by Korean scholarly societies. Then, it builds and maintains a database of bibliographic information and the full text of those materials. Bibliographic information is processed with XML DTD developed by KISTI. If the manuscripts are not submitted as PDFs but rather as MS Word files or Hangul files, they are processed as PDFs. OCEAN accumulates and maintains such bibliographic information and full-text submissions. The accumulated information and files are accessed and served by KISTI's systems (NDSL, KoreaScience, KPubS, and others, to be described below) and commercial search engines (NAVER, Google, and others). JISTaP benefits from all these channels.

**KoreaScience**

KISTI's KoreaScience is a reference linking platform of Korea journals in science & technology (KISTI, 2018c). In 2008, KISTI launched KoreaScience in English so that international researchers can conveniently access the full text of 469 Korean science and technology journals; it is the default landing page for the DOI assigned to journal articles. JISTaP also uses KoreaScience as a DOI landing page and an OA repository (although the articles are also available on the JISTaP website and KPubS).

As KoreaScience has provided Korean journal articles with DOIs for users, the visibility and citations of the Korean journals have increased. KISTI has been a sponsoring member of CrossRef since 2007 and assigned DOIs to articles of Korean journals from 2008 to 2015. In 2016, KISTI became the 10th DOI Registration Agency (RA) in the world and, as a result, created the Korea DOI Centre (see www.doi.or.kr/wordpress/). Since then, KISTI has assigned and registered DOIs to articles of Korean journals by itself, without using CrossRef. As of 2018, KISTI is reconsidering whether to maintain its CrossRef membership.

KISTI's ability to assign DOIs enables JISTaP to receive DOIs much sooner than other journals. Such speed facilitates the publication process, especially when an issue's deadline is near.

KISTI's Korea DOI Centre assigns DOIs to non-textual data, such as tables and figures published in journal articles. Before this service was open to other journals, it was implemented with JISTaP, once again demonstrating the journal's value to KISTI as a testbed.

**National Digital Science Library**

The NDSL (www.ndsl.kr/index.do/), provided by KISTI, is a science and technology information service platform whose goal is to contribute to national science and technology innovation by presenting high-quality domestic and international information. It offers journal articles and conference proceedings from Korea and other countries, patents of Korea, Japan, the USA, Europe, and World Intellectual Property Organization (WIPO); Korea R&D reports, analysis reports of Korean research centres; current trends and issues in the science and technology field from around the world; information about Korean researchers; and information about Korean research centres. Through NDSL, users can search for and access JISTaP articles.

**JISTaP homepage**

JISTaP has its own homepage that provides information about the journal, including its aims, scopes, policies, guidelines, and more. Researchers can submit their manuscripts using ACOMS 4.0 at 'E-submission' (see KISTI, 2018b). All issues and articles are available on this site as PDF files. The JISTaP homepage also links to the article on KPubS.

The JISTaP homepage could be improved by a better user interface and additional content. Although the need to improve the JISTaP homepage has been reported to KISTI, the institute has not budgeted for this effort.

**CONCLUSIONS**

JISTaP uses KISTI's human resources, budget, and information technology infrastructures for publishing, archiving, and distributing. This reliance affects JISTaP's development opportunities and constraints, but the benefits for JISTaP outweigh the costs.

The biggest benefit is KISTI's financial support, which makes it possible for JISTaP to be an OA journal and, consequently, more visible, accessible, and usable. KISTI pays for the publishing, copy-editing, typesetting, printing, distribution, and promotion of JISTaP. KISTI's support also pays for JISTaP's membership in several international organizations relevant to journal publishing.

Because KISTI is JISTaP's sole source of financial support, the journal's budget is tied tightly to the institute's. KISTI's budget is affected by national government funds, so JISTaP's budget is unstable. These financial constraints have a significant effect on the journal, as shown by the greatly reduced print production and the journal's outdated homepage.

JISTaP can use KISTI's systems, platforms, and databases for publishing, archiving, and disseminating journals, all for free. However, the journal cannot use different systems, even if better options are available. Although potentially limiting to the journal, JISTaP's exclusive use of KISTI's technology infrastructure helps to improve it. Using JISTaP as a test bed for new systems, such as ACOMS 4.0 and KPubS, was one of the reasons KISTI published the journal to begin with.

JISTaP can take advantage of the human resources of KISTI. A common perception is that, because KISTI is an institute and not a scholarly society, JISTaP is at a disadvantage when soliciting manuscripts. While scholarly societies naturally gather potential authors with the same research interest, KISTI's researchers have diverse interests, potentially limiting the pool of KISTI authors interested in information science. However, KISTI incentivizes its researchers to contribute to the journal by recognizing their publications as research achievements. Being located within KISTI also makes it easy to recruit the institute's researchers as reviewers and editors for JISTaP.
KISTI researchers help to internationalize JISTaP. Many KISTI researchers use their social and professional networks to help recruit international researchers as authors, editors, and reviewers. The free English copy-editing service probably encourages a greater number of non-native English speakers to contribute to JISTaP. Currently, the majority of JISTaP authors come from certain Asian countries. JISTaP should get more authors from more countries so that it can better contribute to global society by disseminating diverse, international knowledge on information science.

So far, KISTI has not exhibited much operational control over JISTaP, whose editorial board has great freedom over the journal. However, the journal’s reliance on a single sponsor does make it vulnerable. KISTI publishes JISTaP for its own purposes, and the institute could, 1 day, decide to stop publishing it, just as it stopped publishing the JIM in 2012. JISTaP has demonstrated its value to KISTI by being included in the widely recognized Scopus database. JISTaP is currently preparing to apply for inclusion in Social Science Citation Index (SSCI)/SCI to further demonstrate its value. Currently, JISTaP and KISTI mutually support each other. KISTI’s support for JISTaP is especially helpful in a publishing environment with an increasing number of international journals, which also heightens the competition for good content. JISTaP helps KISTI by being a test bed for the institute’s publishing infrastructures, which KISTI makes available to Korean publishers for free whenever possible. In this way, JISTaP is an important part of KISTI’s government-funded mission, which is to enhance the Korean publishing field.

REFERENCES
Hong, J. H. (2008). A study on copyright possession for open access and archiving of scholarly journal paper registered in Korean Research Foundation. Journal of Korean Library and Information Science Society, 39(1), 431–463. https://doi.org/10.16981/kliiss.39.1.200803.431
Joung, K. H., & Rowley, J. (2017). Scholarly communication and open access: Perspectives from Korea. Learned Publishing, 30(4), 259–267. https://doi.org/10.1002/leap.1108
Korea Institute of Science and Technology Information. (2018a). Aims & Scope. Retrieved from http://www.jistap.org/journal.do?method=journalIntro&journalSeq=J000043&menuId=&introMenuId=0101&jistap_menuId=1
Korea Institute of Science and Technology Information. (2018b). JISTaP. Retrieved from http://www.jistap.org/
Korea Institute of Science and Technology Information. (2018c). KoreaScience: A reference linking platform of Korea journals in S&T. Retrieved from http://koreascience.or.kr/MainPage.jsp
Korea Institute of Science and Technology Information. (2018d). What is KPubS. Retrieved from http://www.kpubs.org/about/aboutWhat.kpubs
OA2020. (2018). Today’s scholarly journals open, re-usable, sustainable. Retrieved from https://oa2020.org/
Oh, D. G., Yeo, J. S., & Park, S. H. (2015). An analysis on the success factors of international journal by institution: With a special regard to the case of the ETRI journal. Journal of the Korean Society for Information Management, 32(3), 361–375. https://doi.org/10.3743/KOSIM.2015.32.3.361
Yi, I. H. (1998). Towards globalization of academic journals: Focusing on SCI listing experience of “ETRI Journal”. The Magazine of the IEEK, 170(7), 28–40.
Yu, J. B. (2001). A study on selection of the SCI in domestic journals. Journal of the Korean Society for Information Management, 18(3), 7–28.