

## Patterns of Research Output Produced by Scholarly Communities in Korea

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### ABSTRACT

Open Access is a new trend in the scholarly communication. The purposes of this study are to identify this new trend, to aid in the development of an open-access-based knowledge and information flow model organized by subject areas, and to further seek ways facilitate the communication process in scholarly communities in Korea. To this end, types of research output that are produced as a result of R&D activities are reported here. As well, research patterns and levels of understanding of information sharing are investigated. Data are collected through surveys. The survey population consists of registered KISTI customers. The major areas of analysis include the types of research output, publishing objectives, awareness regarding copyrights, information sharing, preservation of information, and the respondents' opinions of and experiences with trusted-digital archives. In summary, our study results show the following:

- 1) The most commonly reported research output is a technical report (65.2%), followed by presentation materials (63.2%).
- 2) The main objective of publishing research output is to satisfy the requirement of an author's affiliation (65.2%).
- 3) The awareness of copyrights regarding research output should be managed first by themselves (68.0%), and secondly by the organization where they are employed (24%).
- 4) Having Open Access while producing research output would be helpful and beneficial for improving the research process (75.2%).
- 5) The preferred method for sharing among Korea researchers is off-line (29.7%).
- 6) A majority of researchers in Korea prefer personnel computers as a preservation tool (48.3%).
- 7) In the opinion of TDR, the majority of researchers want an IR (Institutional Repository) primarily operated and managed by their organization (39.6%), or managed by a governmental organization (34%).

*Keywords: Open Access, Scholarly Communication, Research Activities, Publication, Trusted Archive*

### I. Introduction

#### Background

Internet has provided people with a lot of benefits. New forms of digital information such as primary research data have become available for researchers with access to a personal computer. This aids them in doing their own data interpretation, and reduces their reliance on the published interpretations of others. As a result, research behavior is changing. Researchers are demanding immediate, direct access to information and increasingly expect to be able to access that information in its raw as well as its interpreted form (Brindley, 2005).

Meanwhile, with the ever-increasing journal subscription charges, many academic libraries cannot afford to buy all of the titles appropriate to the needs of the research staff in their organizations. As a result, users cannot often access papers that are pertinent to their research topics. Over the past two decades, the so-called 'serial crisis' has become more and more acute. Journal prices have risen faster than both the rate of inflation and the rate of increases in library budgets, exacerbating the problem (Oppenheim, 2005).

The concept 'Open Access' emerged in 1990's in an effort to overcome this situation. Open access involves the use of scholarly materials without a subscription charge. There are typically two kinds of open access movements: open access journals and electronic repositories (Falk 2004). In 1992, just five journals offered open access to the material they published. Today, that number has grown to approximately 1,900 journals. As well, the number of the repositories has increased to about 350.

#### The Situation in Korea

The situation regarding the Korean scholarly journal market is somewhat different from that of more developed countries. Although there are many scholarly journals published in Korea, researchers whose work is related to science and technology subscribe to more foreign journals than they do domestic ones. However, the need for an electronic repository may not differ from that of foreign countries. Accordingly,