

Digital Documents in Grey Literature: New Challenges

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Abstract

The process of transition from paper to digital technology proves to be complicated, expensive and of long duration. Several problems of different nature and scale but equally important – not only technological and technical but also organizational, legal, economic, ethical – have to be solved. Moreover, the problems cannot be solved on corporative level only since they have much to do with the information standard of the scientific community as a whole. The problems of digital document turnover in grey literature are considered in the paper. Among them the need to revise the relevant standards and instructive documents, ensuring the financial support of the digital technologies development, the limited nature of the commercial paradigm in the sphere of scientific and technical information, the problems of copyright and scientific ethics.

Introduction

Several factors result in an increasing importance of grey literature in scientific communications nowadays. A fascinating success of computer networks creating new virtual environment, advanced application software packages for integrating text with complicated mathematical or chemical formulae and illustrative material favour the widespread development of digitally-born documents self-archived by the authors of scientific and technical papers and therefore being related to grey literature. If during several latest hundred years scientific information exchange was founded on printed matter then grey literature becomes the information basis of today's knowledge society. Publication is no longer synonymous to printing but rather may mean presentation on an open Internet site. New digital environment in document preparation, demand and supply shifts accents but presents new challenges to grey literature libraries and information centres.

There is a federal information centre for grey literature in Moscow – the Scientific and Technical Information Centre of Russia (VNTIC) collecting Russian scientific and technical (research and development) reports and dissertations (theses) and disseminating information on them. More than 30 thousand dissertations (approximately 25 thousand candidate and 5 thousand doctoral) and nearly 10 thousand reports arrive at VNTIC annually which means nearly 10 million pages every year. Thus the Centre is quite an information factory continuously processing, storing and making available the grey literature documents to the scientific and scholarly community. Even the quantity of arriving documents in itself turns out to present a problem of quality.

Traditionally VNTIC deals with documents arriving on paper. By the way, one of the reasons for the robustness of paper in bureaucratic environment has much to do with attesting the document by means of head of organization's original signature and official seal. On arrival the bibliographic (the so-called secondary) documents were keyed-in or scanned to be digitally entered into the database and the full-text (the so-called primary) documents were microfilmed to be stored on microfiches. The secondary documents contain metadata (including the abstracts) on primary documents; the corresponding primary and secondary documents have the same inventory number. Since the late nineties practically all the research reports and dissertations have originally been prepared on personal computers. It seemed evident that the scientific community in Russia was ready to present the obligatory documents in digital form. VNTIC had to meet this challenge and started to work out the new technology for digital document collecting, processing, storing and disseminating.

The Federal Scale Problem

The problem of transition from paper to digital document turnover is versatile and many-sided especially in federal centre environment with huge document flows mentioned above, tens of thousands researchers and research organizations engaged in information supply to the Centre in accordance with the Federal Law "On the obligatory copy of documents", about one million potential scientific and technical information