Chapter 52
Transforming Technical Services:
Maximizing Technology to Minimize Risk

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ABSTRACT

The current economic downturn has resulted in constantly shrinking budgets and drastic staff reduction at the University of California, Santa Cruz (UCSC) Library. Meanwhile, rapid shifting to digital formats as well as dramatic growth in social networking, mobile applications and cloud computing continues. To face these challenges, the Technical Services (TS) at the university library at UCSC need a transformation. This chapter discusses how the authors have adopted the strategy of maximizing technology in utilizing "robot-like" batch processing tools in house to minimize the risk of becoming ineffective or irrelevant. In aligning human resources to apply those tools to achieve our goals in tandem with the mission of the library, the authors learn to work with the various issues and the barriers that we have encountered during the past decade. The authors are examining the changes brought to the department through the process, highlighting a plan of action, and providing guidance for those interested in bringing about a technological transformation that will continue into the future.

INTRODUCTION

The current sustained downward budget pressure and rapid technological advances have created unprecedented challenges for all academic libraries including the library system at the University of California, Santa Cruz (UCSC). The mechanisms for learning and information dissemination in our society have been shifting from authoritative sources to people's social networks. Social media have grown to be an integral and increasingly important part of the everyday lives of hundreds of millions of users around the world. Explosive growth of mobile devices and applications has driven new services. Next generation fast paced users require next generation solutions in library services to ensure library relevance in an increasing digital, online and networked world. Data is

becoming obsolete faster and knowledge built on the data less durable. We are seeing powerful technologies and information systems causing a parallel change in the knowledge base and in learning, communicating and collaborating approaches in libraries. In order to remain relevant, to identify key factors in technology use, as well as to face rapidly changing user behavior, the UCSC library system has continuously reviewed its services and collections.

Technical services are an important creator and manager of information. Their competency in identifying, acquiring, analyzing and delivering appropriate information plays a significant part in the efficiency and effectiveness of the organization's performance. As information is rapidly moving from print to digital and to online, users are flocking to technology to discover and use information in the new formats. Many previous manual operations to handle tangible objects have to take advantage of technology to migrate to new services. Dunlap (2012) gives a good description of the situation. According to him:

The internet turned the whole library-world upside-down. Instead of going to the library as the easiest course of action for students... Google has replaced that whole paradigm. We now have to go to the students (and also demonstrate to faculty and administrators) to tell them that we have a part to play in the education of students. Technical Services provides the additional human element to organizing information and making it "find-able" quickly. Google's search ranking algorithms remain a trade secret. We can do better, and must.

Fessler (2007) also states that we need:

A hybrid chief information officer, systems engineer, Internet architect, and strategic planner who also happens to manage the selection, cataloging, acquisition, organization, and labeling information packages for a library. Other duties will also include digitization project management and digital archiving. This new librarian has been dubbed "Librarian 2.0" in library blogs … However, all that said, how does today's library plan for tomorrow['s] move from theory to reality at a time of stringent budgets, aging workforces, and unprecedented technological development? Addressing the competency gaps for present and future librarians is the most obvious and critical need. The technical services librarian/department of tomorrow will need a whole expanded set of competencies to swiftly respond to the vast changes in the bibliographic/information universe … Tomorrow's technical services librarians will not be able to survive without sound grounding in technologies as they evolve. (p. 139)

There is a sense of great urgency for many technical services departments to change, to think outside the box, to re-organize, and to seek alternatives or aggressive methods of stretching resources as well as equipping library staff with the necessary skills to meet the organizational missions.

BACKGROUND

Many academic libraries have been working with their technology (IT) department to seek a technology solution. The Technical Services (TS) at UCSC is also seeking technological solutions to save human labor and provide prompt services to support the library missions amidst dwindling resources. Developing and implementing automated means to perform repetitive, mechanical or time-consuming tasks, especially in the manipulation of massive bibliographic data, will allow us to respond quickly to users and expand the scope of available resources. During the past decade, we have found it cost-effective for our own Technical Services staff to develop the needed IT skills, instead of competing for attention from another department for specialized IT support as

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