The No-Nonsense Guide to Born-Digital Content

By Heather Ryan and Walker Sampson. London: Facet Publishing, 2018. 240 pp. Softcover and EPUB. $75.99US, £59.95UK. Softcover ISBN 978-1-78330-195-9; EPUB ISBN 978-1-78330-256-7.

The No-Nonsense Guide to Born-Digital Content is a one-stop-shop introduction to the basic considerations of understanding, collecting, and preserving born-digital content. The authors, Heather Ryan and Walker Sampson, offer a practical guide that is intellectually stimulating for many different audiences, especially students, practitioners, and archives enthusiasts. Heather Ryan (at present Heather Bowden) is the director of the Special Collections, Archives, and Preservation Department at the University of Colorado Boulder Libraries. Coauthor Walker Sampson works alongside Ryan as the university libraries' digital archivist. Both authors have an impressive background of professional and scholarly accomplishments, including instruction on digital preservation and authoring articles and essays on digital preservation advocacy and assessment, electronic records management, file format sustainability, and forensic workflows and workstations to name a few. Ryan has also served in leadership roles for several major international and cross-disciplinary initiatives (e.g., Carolina Digital Curriculum Project, or DigCCurr, and Digital Preservation Outreach and Education program, or DPOE). In *The No-Nonsense Guide*, readers will find a wide range of topics on strategic and practical approaches to collecting and preserving born-digital content. Overall, Ryan and Sampson's practical insights and synthesis of digital preservation theory and practice make this book not only a handy resource, but an excellent addition to the fundamentals of digital archives.

In the book's foreword, Trevor Owens, head of digital content management at the Library of Congress, expresses the need for a broader community of professionals in libraries and archives to learn about and explore born-digital content—a perspective shared by many authors in the field of digital preservation theory and practice.[1] Owens notes, "if our institutions are to meet the mounting challenges of serving the cultural memory functions of an increasingly digital-first society the institutions themselves need to transition to become digital-first themselves. . . . You don't go to a digital doctor to get someone who uses computing as part of their medical practice, and we can't expect that the digital archivists are the ones who will be the people who do digital things in archives" (p. xi).

The authors begin chapter 1, "Digital Information Basics," by explaining exactly what digital information encompasses and introducing the binary components of digital content. The binary system is critical to understanding

computing environments and how digital information is structured and rendered. As complex as it may appear, much of the information we create today is simply an expression of ones and zeros. The chapter continues with an examination of the different types of storage media and the basics of the command line—another undertreated topic in many start-to-end resources focused on digital preservation.

Chapter 2, "Selection," offers a thoughtful guide on how to begin selecting and acquiring born-digital content and the factors that can influence decision-making processes. Because appraisal and selection have been examined (and re-examined) at length, the authors emphasize, instead, the relationship between file formats and content in policy and collecting decisions. The authors encourage practitioners to consider their institutions' collecting policies and mission statements and the realities of preserving and providing long-term access. These recommendations are followed by a discussion on the practical considerations of acquisition in chapter 3, "Acquisition, Accessioning and Ingest." The authors explain how to maintain original order and protect the integrity of contextual information when receiving different born-digital materials. For example, capturing contextual information for a floppy disk is vastly different from capturing information for network-born content (e.g., website).

Chapter 4, "Description," offers a brief overview of methods for describing born-digital content. In addition to identifying specific metadata elements that are more suitable for born-digital materials, Ryan and Sampson provide an informative table that matches metadata standards with corresponding elements appropriate for born-digital content. For example, archivists can record timestamp information (i.e., date and time of web-crawling session) into a date element, which can be found in many archival descriptive standards (e.g., AACR2, DACS, Dublin Core, PREMIS). However, fixity information can only be recorded in a PREMIS metadata element. The important thing to remember, as the authors note, "is that the more information you collect about your born-digital content, the greater the probability that you will be able to preserve and provide access to that content" (p. 108).

Chapter 5, "Digital Preservation Storage and Strategies," transitions into more complex topics and high-level initiatives appropriate from an organizational perspective, such as capabilities of preservation storage systems, repository auditing and certification, infrastructure models and frameworks, and institutional policy. Ryan and Sampson make a respectable effort to cover such dense topics in under eighteen pages. The further reading section of the chapter lists a few educational resources that discuss some of these topics at length.

The authors move from digital preservation storage and strategy to access strategy in chapter 6, "Access." Many variables can affect an institution's access strategy, Ryan and Sampson note, including technological infrastructure, the

nature of born-digital content (e.g., personal or sensitive), rights, hardware and software, and significant properties for digital files. The authors also share several methods for delivering born-digital content—from online, limited online, and on-site access—and the corresponding requirements and long-term responsibilities for each.

Chapter 7, "Designing and Implementing Workflows," provides readers with tips and strategies for designing a workflow—a topic that has gained popular appeal in recent years in many professional conferences and workshops. Workflows are important for several reasons, perhaps first and foremost because they help translate tasks and actions into sequential processes for efficiency. Ryan and Sampson recommend several guiding principles for developing a design and connecting it with institutional policy. Developing a workflow model cannot be overemphasized; it is an incredibly helpful approach for communicating complex tasks within departments and to colleagues in different disciplines.

The last chapter, "New and Emerging Areas in Born-Digital Materials," identifies new and creative areas of work. Readers will find information on changing storage technologies, software preservation, personal devices, digital art and emerging media, and access technologies. As methods for storing and retrieving data continue to develop at an atomic level, information professionals in cultural heritage will need to continue exploring nontraditional solutions to long-term preservation and access.

The back matter of the book leaves readers with a solid sense of direction for where to go next. The appendixes for *The No-Nonsense Guide* are immensely helpful for traversing digital preservation resources, communities, and learning opportunities. Appendix A includes a helpful list of publications, technical registries, online learning tutorials and websites, conferences, and communities to consider joining. Appendix B contains an abbreviated list of commands for using command line interface, which is emphasized as an important skill set for any librarian or archivist (indeed!). These carefully curated lists of resources and exercises would serve as an excellent toolkit for practitioners participating in digital-archives-focused workshops, especially courses in the Society of American Archivists' Digital Archives Specialist Curriculum and Certificate Program.

The front matter and chapters 1 through 4 may be most valuable to a wide range of archives professionals, including students and new(er) professionals and experienced archivists alike. Archives administrators may be drawn to chapters 5, 6, and 7 to better connect with organizational perspectives, access strategies, and workflows that involve cross-departmental work. Digital archivists and preservation librarians, on the other hand, should embrace this book cover-to-cover, whether to enhance current knowledge or for a refreshing look at practices developing in the digital preservation community. In short, Ryan

and Sampson synthesize a myriad of community practices and highly technical documentation, standards, and models into clear prose with minimal jargon, and they make a substantial contribution to the professional literature. I anticipate that *The No-Nonsense Guide to Born-Digital Content* will prove to be a valuable resource in and outside of the classroom for many years to come.

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Note

[1] For example, see Luciana Duranti and Randy Preston, *International Research on Permanent Authentic Records in Electronic Systems (InterPARES) 2: Experiential, Interactive and Dynamic Records* (Padua, Italy: CLEUP, 2008); Matthew Kirschenbaum et al., *Digital Forensics and Born-Digital Content in Cultural Heritage Collections* (Washington, DC: CLIR, 2010); Christopher A. Lee, ed., *I, Digital: Personal Collections in the Digital Era* (Chicago: Society of American Archivists, 2011); and Trevor Owens, "We're All Digital Archivists Now: An Interview with Sibyl Schaefer," *The Signal Blog*, September 24, 2014, https://blogs.loc.gov/thesignal/2014/09/were-all-digital-archivists-now-an-interview-with-sibyl-schaefer.