larger philosophical, technological, and ethical issues and opportunities, both enchanting and disturbing, that are facing archives in the present and (fright-eningly near) future. For these reasons, the text is not only essential reading for those interested in the intersection of art and archives, but is also a rich site for reflection on the nature and capacities of archives in contemporary society.

Catherine MacArthur Falls

Module 8: Becoming a Trusted Digital Repository. STEVE MARKS. Chicago: Society of American Archivists, 2015. xxv, 68 pp. ISBN 1-931666-84-9.

Steve Marks has accomplished something that very few people in the world have: he created a Trusted Digital Repository (TDR) that met the criteria of the Trustworthy Repositories Audit & Certification (TRAC). It was the first repository in Canada, and one of only six in the world. Because of the significance of this task, this publication is important to consider: the author went beyond theorizing how a TDR could be created and actually achieved it.

Marks undertook this task when he was the digital preservation librarian at the Toronto-based Scholars Portal, a service of the Ontario Council of University Libraries (OCUL): the Scholars Portal e-journals database TDR passed the very stringent Centre for Research Libraries (CRL) audit and obtained the rare certification in February 2013. To pass the audit and be granted certification, a TDR must demonstrate compliance with the TRAC criteria and the strict "gold standard" of ISO 16363, Audit and Certification of Trustworthy Digital Repositories. Marks defines this ISO as "an internationally recognized set of criteria that can be used to measure the credibility of repositories' specific preservation programs and services" (p. 2).

The book is published by the Society of American Archivists (SAA) and is part of its Trends in Archives Practice series. I applaud SAA for creating this series: the books are well priced, short (around 100 pages), and available in print, EPUB, and PDF formats. Marks contributed this publication to the series in 2015 in order to share with the archival community his knowledge of TDRs and his experience with audits.

The book starts with a note written by editor Michael Shallcross, who provides a short, helpful explanation of why ISO 16363 is important for archives. The introduction by Bruce Ambacher focuses on the history of trustworthiness and the development of the ISO standard. While well written and interesting, Ambacher's chapter might be too detailed for some readers,

¹ Marks has since moved on to become the digital preservation librarian at the University of Toronto Libraries, Information Technology Services.

who may find that it distracts from Marks's more practical section. The introduction could have been pared down to the last two, more practice-based discussions – "Test Audits" and "Dissemination and Adoption" – which will appeal to the majority of readers looking to gain insight into the more practical nature of this topic.

The main part of the book, written by Marks, focuses on the three most important sections of ISO 16363 for archivists:

- Section 3: Organizational Infrastructure evaluates organizational structures and management, and includes mission, staffing, financial sustainability, rights, etc.
- Section 4: Digital Object Management evaluates how digital materials are handled, and includes acquisition, preservation, information management, access management, etc.
- Section 5: Infrastructure and Security Risk Management evaluates risk, and it includes technical infrastructure management, security risk management, etc.

The logical layout of the book makes it easy to read and use as a reference when needed. Each of the three sections has a list of criteria or metrics, and "each metric consists of a requirement statement, supporting text, examples, and discussion" (p. 9). Marks provides a succinct description in plain language for each metric, particularly in sections 3 and 5. Section 4 falters in comparison with the plain-language strength of the other sections, because one has to be familiar with the Open Archival Information System (OAIS) model to fully understand all the concepts and nuances. Overall, Marks manages to make these very technical explanations as "readable" as possible for those who might be new to the subject.

Marks also provides recommendations when ISO 16363 falls short in its explanation. For example, metric 3.1.2 focuses on a preservation strategic plan, but the ISO does not provide a great deal of guidance on what might be included in such a plan (p. 11). By sharing with the reader what he included in his Scholars Portal plan, Marks fills in some gaps in the ISO standard.

Marks also identifies informative resources in many of the metrics. For example, metric 3.4.1 focuses on business planning processes (p. 21). Marks provides useful advice when he explains that dedicated budgets are the "easiest way to pass" this metric, and he goes further by specifying a resource for identifying alternative revenue models for archives that may need them (p. 21).

Despite its strengths, the module is uneven in places. Some of the metrics could have benefited from more detailed descriptions and recommendations. For example, in metric 3.4.3 Marks notes that he could not go into detail about how to establish an institution's financial stability, because it was "beyond the scope of the module, especially given that the process is different for every type of institution" (p. 22). I understand this concern, and while Marks does advise archivists to consult with an institutional specialist, he could have

added more generic advice, as he does for the other metrics. This would have greatly benefited the reader as Marks's experience is so rare and valuable.

Marks's use of specific examples in his descriptions of metrics feels uneven as well. He provides very useful examples from his Scholars Portal work in some metrics, such as when he details part of the Scholars Portal Preservation Strategic Plan in 3.1.2 and 3.3.2 (pp. 11, 17). His advice in most of the other metrics is clearly based on his work at Scholars Portal, even though it is not specifically mentioned.² However, not every metric description includes these types of examples; those that do not are not as helpful to the reader. Building a TDR and going through an audit are rare events. More direct references to his comprehensive online Scholars Portal documentation would have benefited readers in a substantial way, even those working in very different environments. As well, readers might have learned from the experiences of others who have tried to set up a TDR and/or complete the audit metrics had Marks included these.

Following the main section is an appendix that comprises a very short case study written by Bethany Anderson of the University Archives at the University of Illinois at Urbana-Champaign. Anderson describes an informal TDR self-assessment that she conducted in her academic archives using Marks's module as a guide. The case study is well written and interesting, but in my view it is not detailed enough to be a useful resource. It almost feels tacked on to the module. If it had been integrated into it as a metric example, readers would have benefited not only from Marks's experience as a librarian who built a certified TDR in an academic consortium, but also from an academic-based archivist who tested the process.

Another limitation of the publication is that, while the author has a solid understanding of archival theory, principles, and practice, there are a few recommendations and resources in which the archivist's role in the process could have been more strongly articulated. For example, metric 4.1.1 focuses on identifying the content and "significant properties" of the content type to be preserved (p. 27). Marks recommends that the "Designated Community" (users) and "Producers" (donors/internal contributors) be asked to identify "which information properties are important to them" (p. 28). He advises that the archivist "might also [emphasis added] consider which information properties have high evidential and/or informational value or are crucial to the object's authenticity" (p. 28). I was pleased that he included the "archival consideration," even though the ISO does not require it. However, as a digital archivist who has worked with many types of born-digital materials in

² Marks indicates this in his introductory section: "The interpretations and information contained in the module come from the author's experience ... in 2012 at Scholars Portal" (p. 3).

different archives, I believe that the archivist's choice of information properties is absolutely crucial, and not optional. In my view, the archivist is the only one who can – through the careful choice of information properties – ensure the authenticity of born-digital archival materials and provide users with an understanding of their context.

In that same metric, Marks also states that "accurate file creation dates are often an *important* [emphasis added] piece of evidence in establishing authenticity and should be preserved" (p. 28). Again, as a digital archivist, I would assert that accurate file creation dates are absolutely critical, not just important, because they provide the context and authenticity of that archival material. Without accurate creation dates, the material holds little or no value for the public or the archives.

Few archivists are likely to create a TDR, let alone have one audited and certified. Attempting to build a full TDR, even without certification, is rare because it relies on the archivist obtaining IT support, upper-level administrative support, and a budget increase at the same time. The book offers archivists a rare glimpse into TDRs and the auditing process. As Shallcross states, it is also "a practical guide to improving accountability and transparency in the handling of digital archives" (p. x). This is the reason archivists should read this book and consider it a valuable resource to have on their bookshelf: not necessarily so they can set up a TDR in their workplace or try to obtain certification, but to learn about the ISO 16363 best practices for digital preservation, storage, and access systems; and, even more importantly, to learn about the different components, many of which are not technically based (e.g., policies), that help form a TDR.

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