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University of Zagreb

FACULTY OF HUMANITIES AND SOCIAL SCIENCES

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DOCTORAL THESIS

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Supervisor: Sonja Špiranec, Ph.D.

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Sveučilište u Zagrebu

FILOZOFSKI FAKULTET

Mirela Rončević

ODRŽIVOST MODELA SKUPNOG FINANCIRANJA ZNANSTVENIH E-KNJIGA U OTVORENOM PRISTUPU

DOKTORSKI RAD

Mentor: dr. sc. Sonja Špiranec

Zagreb, 2021

Supervisor: Sonja Špiranec, Ph.D.

Biography

Sonja Špiranec graduated in 1998 from the Faculty of Philosophy and Social Sciences, University of Zagreb, with a degree in Information Science (Librarianship) and German Language and Literature. In the same year, she landed a position at the National and University Library in Zagreb. In 2001 she enrolled in postgraduate studies at the Department of Information Sciences, to which she transferred in 2004 as a research novice on the following projects: “Organization of information and knowledge in the electronic educational environment” and “Organization, management and exchange of knowledge in the electronic educational environment.” She received her doctorate in 2007 and was elected to the scientific-teaching title of assistant professor in 2008. Since 2019, dr. Špiranec is a full-time professor at the Faculty of Philosophy, the University of Zagreb.

Since 2004 she has been participating in undergraduate, graduate, and postgraduate studies at the Department of Information and Communication Sciences in Zagreb, teaching a range of courses, including: “Epistemology of Information Science,” “Marking and Search Systems,” “Information Literacy,” “Fundamentals of Information Literacy,” “Electronic educational environments,” “Digital educational libraries,” “Index languages,” “Research methodology in information sciences,” “Information science theory,” and “Information behavior, practices and literacy.”

Dr. Sonja Špiranec holds the following positions at the Faculty of Philosophy, the University of Zagreb: 1. Head of the Doctoral Study of Information and Communication Sciences, 2. Head of the Librarianship Study for Part-Time Students 3. Head of the Department of Information Studies and a representative (at national level) for the ERIH-Plus database.

She is the author of two academic books as well as a series of articles in national and international scholarly journals. She regularly participates in international academic conferences, publishing papers in conference proceedings, reviewing papers, and holding positions in

international conference committees (INFuture, INTED, EDULearn, Bobcatsss, IMCW: International Symposium on Information Management in a Changing World). She has participated in international projects (Erasmus Intensive Program 2011 and 2012: Academic Summer School Library, Information and Cultural Management and Information and Communication Technology in supporting the educational process) and the Croatian Science Foundation project (RACOSS: Scientific activity, cooperation and research orientation) in social sciences in Croatia and other post-socialist European countries (IP-09-2014-9351).

Dr. Špiranec is currently coordinating the international project "Introducing Intellectual Property Education for Lifelong Learning and the Knowledge Economy (IPEDU)" at the University of Zagreb as a partner in the Erasmus + Program, KA2 and KA203, and participates in the international project DigiTools. Since 2006, she has participated in various UNESCO projects, initiatives, and conferences dedicated to information and media literacy, such as the development of the Action Plan and Information Literacy Platform, and the Declaration on Information and Media Literacy ("Achieving an information society and a Knowledge-based economy through information literacy: proposal for an information literacy platform and an action plan for Central and South-east European countries;" Moscow Declaration on Media and Information Literacy). In 2012, together with associates from the University of Hacettepe in Ankara, she launched the international conference ECIL (European Conference on Information Literacy), which she co-chaired.

Published work

Špiranec, Sonja; Kos, Denis; Michael, George. Searching for critical dimensions in data literacy // Information research, 24 (2019), 4; 1922, 12 (academic article)

Lazić, Nikolaj; Špiranec, Sonja; Lasić Lazić, Jadranka. *The Conceptual and Organisational Features of the Doctoral Programme in Information and Communication Sciences at the University of Zagreb* // INTED 2019 Proceedings (conference paper)

Valencia, Spain: IATED, 2019. str. 7939-7947 doi:10.21125/inted.2019.1965 (academic poster)

Lazić, Nikolaj; Špiranec, Sonja; Banek Zorica, Mihaela. *The Future of the Information Science through the Lens of Doctoral Research Work* // Book of Abstract QQML 2018 / Katsirikou, Anthi (ed.). Athens, Greece: ISAST, 2018. str. 57-58 (academic presentation)

Ferlindeš, Josip; Špiranec, Sonja. Teorijsko-filozofsko utemeljenje knjižnične i informacijske znanosti u filozofiji informacije // Vjesnik bibliotekara Hrvatske, 61 (2018), 1; 37-56 doi:10.30754/vbh.61.1.572 (academic article)

Kos, Denis; Špiranec, Sonja; Čović, Ante. Mapping perspectival ambiguity in Bioethics: revisiting the viewpoint warrant // Challenges and Opportunities for Knowledge Organization in the Digital Age: proceedings of the Fifteenth International ISKO Conference, 2018, Porto, Portugal / Ribeiro, Fernanda; Cerveira, Maria Elisa (ed.).

Porto: International Society for Knowledge Organization (ISKO); University of Porto, Faculty of Arts and Humanities; Research Centre in Communication, Information and Digital Culture, 2018. str. 959-961 (academic poster)

The Sixth European Conference on Information Literacy (ECIL), September 24th-27th, 2018, Oulu, Finland: Abstracts, Oulu: University of Oulu, Department of Information and Communication Studies, 2018 (abstracts booklet)

Mentor: Prof. dr. sc. Sonja Špiranec

Životopis

Dr. sc. Sonja Špiranec diplomirala je 1998. godine na Filozofskom fakultetu Sveučilišta u Zagrebu informatologiju (smjer bibliotekarstvo) i njemački jezik i književnost. Iste se godine zapošljava u Nacionalnoj i sveučilišnoj knjižnici u Zagrebu. Godine 2001. upisuje poslijediplomski studij pri Odsjeku za informacijske znanosti, na koji 2004. prelazi kao znanstvena novakinja na projektima "Organizacija informacija i znanja u elektroničkom obrazovnom okruženju" i "Organizacija, upravljanje i razmjena znanja u elektroničkom obrazovnom okruženju." Doktorirala je 2007. godine a u znanstveno-nastavno zvanje docentice izabrana je 2008. godine. Od 2019. godine dr. sc. Sonja Špiranec je u znanstveno-nastavnom zvanju redovite profesorice na Filozofskom fakultetu u Zagrebu.

Od 2004. godine sudjeluje u izvođenju nastave na preddiplomskom, diplomskom i poslijediplomskom studiju Odsjeka za informacijske i komunikacijske znanosti u Zagrebu s kolegijima "Epistemologija informacijske znanosti", "Sustavi za označivanje i pretraživanje", "Informacijska pismenost", "Osnove informacijske pismenosti", "Elektronička obrazovna okruženja", "Digitalne obrazovne knjižnice", "Indeksni jezici", "Metodologija istraživanja u informacijskim znanostima", "Teorija Informacijske znanosti" i "Informacijsko ponašanje, prakse i pismenost".

Dr. sc. Sonja Špiranec obnaša sljedeće funkcije na Filozofskom fakultetu i Sveučilištu u Zagrebu: 1. voditeljica doktorskog studija *Informacijske i komunikacijske znanosti, 2.* voditeljica studija Bibliotekarstva za izvanredne studente 3. predstojnica Zavoda za informacijske studije 3. članica Povjerenstva za doktorske radove pri Sveučilištu u Zagrebu, te predstavnica (na nacionalnoj razini) za ERIH-Plus bazu podataka.

Autorica je dviju znanstvenih knjiga kao i niza članaka u znanstvenim domaćim i međunarodnim časopisima. Redovito sudjeluje na međunarodnim znanstvenim konferencijama objavljujući radove u zbornicima skupova, recenzirajući radove i obnašajući funkcije u međunarodnim konferencijskim odborima (INFuture, INTED, EDULearn, Bobcatsss, IMCW:

International Symposium on Information Management in a Changing World). Sudjeluje i u međunarodnim projektima (Intenzivni program Erasmus 2011. i 2012.: Akademska ljetna škola Library, Information and Cultural Management i Information and Communication Technology in supporting the educational process) i projektu Hrvatske zaklade za znanost (RACOSS: Znanstvena aktivnost, suradnja i orijentacija istraživanja u društvenim znanostima u Hrvatskoj i ostalim postsocijalističkim europskim zemljama (IP-09-2014-9351).

Trenutno koordinira međunarodni projekt "Introducing Intellctual Property Education for Lifelong Learning and the Knowledge Economy (IPEDU)" u Erasmus+ Programu, KA2 i KA203, te sudjeluje u međunarodnom projektu DigiTools. Od 2006. sudjeluje u različitim projektima, inicijativama i skupovima UNESCO-a posvećenih informacijskoj i medijskoj pismenosti, poput izrade Akcijskog plana i platforme informacijske pismenosti, te Deklaracije o informacijske i medijske pismenosti ("Achieving an information society and a Knowledge-based economy through information literacy: proposal for an information literacy platform and an action plan for Central and South-east European countries"; "Moscow Declaration on Media and Information Literacy"). Godine 2012. sa suradnicima sa Sveučilišta Hacettepe iz Ankare pokreće međunarodnu konferenciju ECIL (European Conference on Information Literacy), kojom supredsjeda.

Objavljeni radovi

Špiranec, Sonja; Kos, Denis; Michael, George Searching for critical dimensions in data literacy // Information research, 24 (2019), 4; 1922, 12 (međunarodna recenzija, članak, znanstveni)

Lazić, Nikolaj; Špiranec, Sonja; Lasić Lazić, Jadranka, The Conceptual and Organisational Features of the Doctoral Programme in Information and Communication Sciences at the University of Zagreb // INTED2019 Proceedings (članak, znanstveni)

Valencia, Spain: IATED, 2019. str. 7939-7947 doi:10.21125/inted.2019.1965 (poster, međunarodna recenzija, cjeloviti rad (in extenso), znanstveni)

Lazić, Nikolaj; Špiranec Sonja; Banek Zorica, Mihaela, The Future of the Information Science through the Lens of Doctoral Research Work // Book of Abstract QQML 2018 / Katsirikou, Anthi (ur.). Athens: ISAST, 2018. str. 57-58 (predavanje, međunarodna recenzija, sažetak, znanstveni)

Ferlindeš, Josip; Špiranec, Sonja, Teorijsko-filozofsko utemeljenje knjižnične i informacijske znanosti u filozofiji informacije // Vjesnik bibliotekara Hrvatske, 61 (2018), 1; 37-56 doi:10.30754/vbh.61.1.572 (recenziran, pregledni rad, znanstveni)

Kos, Denis; Špiranec, Sonja; Čović, Ante Mapping perspectival ambiguity in Bioethics : revisiting the viewpoint warrant // Challenges and Opportunities for Knowledge Organization in the Digital Age: proceedings of the Fifteenth International ISKO Conference, 2018, Porto, Portugal / Ribeiro, Fernanda; Cerveira, Maria Elisa (ur.).

Porto: International Society for Knowledge Organization (ISKO); University of Porto, Faculty of Arts and Humanities; Research Centre in Communication, Information and Digital Culture, 2018. str. 959-961 (poster, međunarodna recenzija, kratko priopćenje, znanstveni)

The Sixth European Conference on Information Literacy (ECIL), 2018, Oulu, Finland: Abstracts, Oulu: University of Oulu, Department of Information and Communication Studies, 2018 (knjiga sažetaka)

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Zahvale

Veliko hvala prof. dr. sc. Sonji Špiranec za mentorstvo, profesionalnost i moralnu podršku tijekom pisanja doktorskog rada i tijekom studija na Sveučilištu u Zagrebu.

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Hvala organizaciji Knowledge Unlatched na opsežnim podacima o korištenju znanstvenih e-knjiga u otvorenom pristupu na platformi JSTOR koji se koriste u kvantitativnom dijelu istraživanja.

Hvala knjižničarima i informacijskim stručnjacima za otvoreni pristup širom Europe koji su sudjelovali u multinacionalnoj anketi provedenoj u siječnju i veljači 2021. godine.

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ABSTRACT

In recent years, new business models that involve libraries as funders of Open Access (OA) academic (or scholarly) e-books have emerged. The model proving to have staying power is the library crowdfunding model (also known as the collaborative model). By joining forces to 'crowdfund' (i.e., finance) the publishing of OA monographs, libraries create benefits for scholars, publishers, researchers, and end users. Little scholarly attention has been given to the sustainability of this model. Questions have emerged: How effective are library crowdfunding initiatives for OA academic e-books (or monographs)? What factors may contribute to their sustainability? What are the main reasons libraries participate in such initiatives? What are the traits of the most supportive institutions?

This study investigates the factors that determine the crowdfunding model's degree of success. The research analyzes OA monograph usage on the JSTOR platform in 167 institutions in 32 countries across Europe, while also investigating the traits of the institutions that have participated in crowdfunding Knowledge Unlatched's multi-disciplinary collection of 663 monographs over the course of five years (2016-2020) and examining those institutions' rankings according to three sources—THE, ARWU, and QS. To gain deeper insight into librarians' perceptions of this model, an anonymous survey of librarians across Europe was conducted, with 160 librarians taking part.

The results of the research indicate that the most reliable factors that help us understand the types of institutions that support crowdfunding include their overall world ranking, research output, citation impact, and international outlook. The institutions that support crowdfunding OA monographs the most are, therefore, highly ranked, stand out for their scholarly contributions, particularly research output, highly cited researchers, and international cultures. Further, scholar-driven crowdfunding initiatives focused on OA monographs in specific disciplines tend to get the most support from the institutions invested in those disciplines. On the other hand, local usage of OA monographs and institutions' size (including student enrollment and faculty size) are not as reliable factors for predicting the institutions likelihood of participating in crowdfunding.

According to the survey's results, librarians support OA monographs because they believe in the basic tenets of the OA movement; library budgets and the cost of OA monographs are the

main reasons they do not participate in crowdfunding initiatives; they do not see local usage of OA monographs as the key factor contributing to their decision to participate in crowdfunding; and the relevance of scholarly disciplines and authors' backgrounds are stronger motivators for them to participate than local usage. Therefore, the most reliable factors contributing to the sustainability of the crowdfunding model for OA academic e-books include the institutions' high world ranking, the institutions' overall reputation and the institutions' investment in research and diversity, their willingness to support locally relevant disciplines and scholars, and the cost of crowdfunding (as well as the monographs) in relation to their library budgets and priorities.

SAŽETAK

Posljednjih godina pojavili su se novi poslovni modeli koji uključuju knjižnice kao glavne sudionike u grupnom financiranju znanstvenih e-knjiga (ili monografija) u otvorenom pristupu (*Open Access*). Model grupnog financiranja *Open Access* monografija (poznat i kao 'suradnički' model) sve više pokazuje svoju učinkovitost i ističe se po svojoj posebnosti. Udružujući snage na globalnom nivou kako bi sufinancirale objavljivanje *Open Access* monografija, knjižnice time pridonose stvaranju novih izdavačkih normi i uvjeta za znanstvenike, izdavače i korisnike. Dosadašnja istraživanjima su vrlo malo pažnje pridavala održivosti ovog modela. Postavljaju se pitanja: Koliko su učinkovite inicijative grupnog financiranja (*crowdfunding*) za *Open Access* monografije? Koji faktori mogu pridonijeti njihovoj održivosti? Koji su glavni razlozi zbog kojih knjižnice sudjeluju u takvim inicijativama? Koje su osobine institucija koje najčešće sudjeluju?

Ovo istraživanje razmatra faktore koji određuju stupanj uspješnosti *crowdfunding* modela. Kvantitativna analizira prati korištenje *Open Access* monografija na platformi JSTOR u 167 institucija u 32 zemlje diljem Europe, istražujući pri tom osobine institucija koje su u proteklih pet godine (2016-2020) financijski podržale multidisciplinarnu Knowledge Unlatched kolekciju koja se sastoji od 663 *Open Access* monografija. Ispituju se karakteristike istih institucija i njihov svjetski rang prema tri izvora – THE, ARWU i QS. Da bi se stekao dublji uvid u percepcije knjižničara o ovom modelu, provedena je anonimna anketa, u kojoj je sudjelovalo 160 knjižničara širom Europe.

Rezultati istraživanja pokazuju da najpouzdaniji faktori koji nam pomažu u prepoznavanju institucija koje podržavaju *crowdfunding* model uključuju: svjetski rang institucije, njezin rang za količinu objavljenih istraživanja, učestalost citiranja njezinih znanstvenika, i njezine internacionalne odlike. Stoga su institucije koje najviše podržavaju objavljivanje monografija u otvorenom pristupu putem grupnog financiranja visoko rangirane i ističu se po svojim značajnim znanstvenim doprinosima—posebno produktivnim i čestim lokalnim istraživanja—često citiranim istraživačima u svjetskoj literaturi kao i internacionalnim aktivnostima. Nadalje, inicijative grupnog financiranja koje vode znanstvenici određenih disciplina imaju tendenciju da dobiju najveću potporu upravo od onih institucija koje najviše ulažu u te iste discipline. S druge strane, lokalno korištenje *Open Access* monografija i sama

veličina institucija (uključujući broj studenata i profesora) nisu pouzdani faktori za predviđanje koje bi institucije (tj. sveučilišta) sudjelovale u budućim *crowdfunding* projektima ove vrste.

Prema rezultatima ankete, knjižničari podržavaju *Open Access* monografije jer još uvijek vjeruju u osnovna načela *Open Access* pokreta; budžeti knjižnica i cijena *Open Access* monografija (tj, trošak sudjelovanja u grupnom financiranju) glavni su razlozi zbog kojih institucije ne sudjeluju u grupnom financiranju; knjižničari ne smatraju korištenje monografija na lokalnom nivou ključnim faktorom koji pridonosi njihovoj odluci o sudjelovanju; a važnost znanstvenih disciplina i podrijekla autora snažniji su motivator za sudjelovanje od lokalnog korištenja. Stoga, najpouzdaniji faktori koji doprinose održivosti *crowdfunding* modela uključuju rang institucija, njihovu reputaciju, ulaganje u istraživanja i internacionalnu raznolikost, njihovu spremnost da pruže podršku lokalno relevantnim disciplinama i znanstvenicima te trošak sudjelovanja u odnosu na knjižničarske budžete.

EXTENDED ABSTRACT

Open Access (OA) academic e-books (also referred to as ‘monographs’)—which are the focus of this dissertation—have taken a while to catch up to academic journals in the OA realm. They have in many ways been left behind in terms of openness, policies, and format—particularly in the Humanities and Social Sciences (HSS) disciplines (Adema, 2019), which have long relied on the monograph format to produce and distribute long-form scholarship. Today the development of OA monographs can be discussed in many contexts and from various angles, as the academic publishing industry and the scholarly community have had time to take part in various OA initiatives, test emerging and alternative business models, learn from trial and error, and advocate for more funding. The UK and Europe have led the way on the OA monograph front, and the first two OA monograph publishers were founded and launched in London in 2008—including Open Book Publishers (OBP) and Open Humanities Press (OHP)—both specializing in the humanities and both going strong over a decade later (Grimme at al., 2019).

In this study, the word ‘monograph’ refers to a scholarly book of sizable length (usually about 80,000 words) written in great detail and with great articulation by a scholar or several scholars on a single, specialized subject or any aspect of that subject. In this regard, the term ‘monograph’ is synonymous with the term ‘scholarly’ or ‘academic’ book. The study uses the same broad definition of the monograph used by earlier studies (e.g., OAPEN-UK, 2015) and therefore comprises both single-authored and multi-authored academic books and their many incarnations. Further, since the term *Open Access* is used exclusively in the context of e-books (books in digital format), it is quite common—standard, in fact—to no longer refer to these publications as e-books but simply as books. It is understood that if they are published OA, the books (or monographs) would be available in digital format. For this reason, the term *Open Access* academic e-book is synonymous with the term *Open Access* academic book.

There has been a growing desire to invest in OA monograph infrastructures, both internationally and nationally. The monograph as a scholarly form has emerged as a vibrant topic of interest for OA policymakers, funders, and stakeholders (JISC, 2014). Moreover, it has in recent years been one of the most dominant topics at conferences focused on OA publishing, particularly in the context of the sustainability of the various OA business models that libraries

and publishers are experimenting with to determine how best to publish and fund OA monographs. At the heart of OA monograph publishing discussions are the insistence (of scholars and publishers) on maintaining rigorous peer-review standards; properly marketing and distributing monographs after publication; insisting that both content and formats are of high quality and accessible universally; and on using the appropriate Creative Commons licenses that allow works to be circulated for non-commercial (rather than commercial) purposes (Elliott, 2015).

There is a growing interest and commitment in European countries to invest in the long-term sustainability of OA monographs. A good example of this is the Plan S initiative for OA publishing, which was launched in September 2018 and is supported by cOAlition S, an international consortium of research funding and research performing organizations. According to Plan S, scientific publications that result from research funded by public grants must be published in compliant OA journals or platforms, starting in 2021. Although Plan S currently applies to peer-reviewed scholarly articles, cOAlition S will, by the end of 2021, issue a statement on Plan S principles as they apply to monographs. The foundation states on its website: "It is understood that the timeline to achieve Open Access for monographs and book chapters will be longer and requires a separate and due process" (European Science Foundation, 2021).

To ensure that OA books are published professionally and in line with academic publishing protocols, various business models have been tested to determine how to publish OA scholarly books digitally and in ways that are financially viable for both authors and publishers on the one end and researchers on the other (Gatti & Mierowsky, 2016). The question that arises is: How should OA monographs be published and available globally without restriction in a way that adequately compensates authors and publishers and does not call into question the quality of the titles or the integrity and reputation of authors and publishers?

Researchers have thus far dealt less with the impact of OA monographs, especially those published through library crowdfunding models, because it is still relatively new and is considered an alternative approach (Reinsfelder, 2018). Some of the earliest OA crowdfunding pilots were launched several years ago (Leach-Murray, 2017), involving initiatives like Knowledge Unlatched (launched in Europe) and UnGlue.It (launched in the United States). Further, OA models have traditionally been supported by STEM institutions and researched in

the context of various STEM fields, in contrast to HSS fields, which are traditionally more connected with monographs (Eve, *OA and the Humanities*, 2014). The cost of publishing HSS monographs is significantly higher than the cost of publishing STEM articles and journals, as monographs are often longer writings that require more editorial and production engagement on the part of publishers (Eve, OA and the Humanities, 2017). Another challenge for OA HSS monographs is that HSS fields are significantly less funded than STEM fields (Davies et al., 2014).

Several OA business models have emerged over the past few years for OA monograph publishing (e.g., Author payment model, New university press, Freemium, Collaborative underwriting, Crowdfunding, Community model). What one immediately notices when comparing various breakdowns of existing business models for OA monographs (Collins et al., 2015; Speicher et al., 2018) is that there is no one-size-fits-all approach to how OA monographs are funded, that different terminologies exist to define models that overlap in many ways, and that some new models are still emerging. It can also be said that some models have evolved to absorb the traits of other models, which at some point had more distinct characteristics but began to merge with others. A good example of this is the Collaborative model, which has also been referred to as the 'crowdfunding' model as well as the "collaborative underwriting' model, and the 'library' model, since it has placed libraries at the center of the collective funding activity which serves to cover the cost of publishing monographs on behalf of authors and for the benefit of publishers and end-users. The fact that there is no consensus yet on how to clearly distinguish between existing (and in many ways, overlapping) business models further attests to the landscape of OA monograph publishing still being in the state of flux and these models still being 'new' and 'alternative' to traditional publishing approaches.

The scholarly community has reiterated over the years the importance of collaboration and effective communication in the entire publishing ecosystem (Deegan, 2017), and OA monograph publishing and the development of effective business models for OA monograph publishing is no exception. Applying 'collective action' to OA monograph publishing makes sense as much as it makes sense when libraries join forces to support non-OA-related endeavors. Collaboration is about joining forces and about sharing. For this reason, throughout this study, this model is described using interchangeable terms, including collaborative funding,

crowdfunding, library crowdfunding, collective source-funding, collective funding, and collective underwriting—all of which mean the same thing: libraries come together to fund the publishing of OA monographs for the benefit of the global research community.

Crowdfunding in libraries via consortia ('coming together') is one of the alternative funding models for OA academic books that have attracted a great deal of attention in the last few years. According to this model, university, research, and national libraries worldwide join forces to 'open' a specific number of academic e-books every year. The money collected from them is then distributed to publishers and authors to avoid author fees. In traditional publishing, the cost associated with publishing works OA is often the authors' responsibility who pay publishers to get their titles published OA using Creative Commons licenses. For this reason, the authors' institutions set aside funds to cover the cost of OA publishing to take the burden off their scholars (Reinsfelder, 2018; Beaubien, 2016). In the past few years, there have been many OA initiatives that rely on crowdfunding to finance the publishing of OA monographs, both front list titles (those born OA, which means they have never been published before in any other format and are brand new titles) and backlist titles (older books which already exist in print and are being permanently converted to OA).

Goals of the study

In library crowdfunding initiatives (or projects), institutions are invited to collaborate and commit funds to benefit the broader global community rather than the local community. Much has been written about the effectiveness of various OA business models. Some studies have focused explicitly on OA monograph publishing. However, questions linger in 2021:

- How effective are library crowdfunding initiatives for OA monographs?
- What factors may contribute to the long-term sustainability of such initiatives?
- What are the main reasons libraries participate or do not participate in such initiatives?
- Do libraries participate for the benefit of the global community, or is their local community still their priority?
- What type of institutions support OA funding through this type of collaboration?

- What are the traits and characteristics of the most supportive institutions?

For the purposes of this study, the terms ‘crowdfunding,’ ‘collaborative,’ and ‘cooperative’ are used interchangeably and are discussed exclusively in the context of OA business models involving libraries. In other words, this study examines the ‘crowdfunding’ models when their participants are libraries (not individuals, or publishers, or authors) and when they serve to enable the publishing of OA monographs. This means that OA initiatives such as Knowledge Unlatched essentially embody at least three distinct models in one: Library, Collaboration, and Crowdfunding model because they invite ‘libraries’ to ‘collaborate’ by participating in ‘crowdfunding,’ which facilitates the publishing of OA monographs for the good of global science.

This study investigates the sustainability of this particular business model to determine the key factors that may contribute to their long-term sustainability that have not previously been studied or have not been studied adequately (e.g., the usage of OA monographs in participating and non-participating institutions, their world ranking, research output, size, international outlook). In other words, this study investigates the factors that determine the collaborative model’s degree of success. One of the main goals is to establish the relationship between the usage of OA books in a wide range of European institutions and the decisions of those institutions to participate in global crowdfunding campaigns of this kind. The study investigates the complexity of this alternative model of crowdfunding OA monographs from the aspect of usage and analytics available from the hosting platform JSTOR, which is available to users and researchers around the world. The objective is to determine whether the institutions allocating the most funds for crowdfunding have the most significant benefit in terms of use and whether insight into the available analytics has a positive impact on the decisions of these institutions to support such models of this kind in the future continuously. The intention is also to identify differences in the use of OA monographs supported through crowdfunding projects between participating institutions and those not participating.

The study also takes a closer look at the institutions that regularly participate in crowdfunding to determine their characteristics and what those institutions may have in common. For this insight, the study relies on examining the data from three world ranking sources: THE World Rankings (by Times Higher Education), Academic Ranking of World

Universities (by ShanghaiRanking Consultancy) and QS World University Rankings (by QS Quacquarelli Symonds). The study critically examines various scores given to the institutions by these three sources, including the overall world ranking score, research output score, citation score, and the international outlook score. The study also profiles the institutions based on their student and faculty size and the institutions' inclinations to support OA initiatives that are closely related to the scholarly disciplines they are most invested in academically.

Finally, the aim is to identify other factors influencing libraries' decisions to participate in crowdfunding monographs. The 'other' factors are explored in more depth via a survey of 160 librarians engaged with OA in a wide range of European institutions. The anonymous survey supplements the findings based on the quantitative research. It investigates 'additional' factors that contribute to the decisions of institutions to participate in crowdfunding OA campaigns (e.g., the very principle of OA and open science; the influence of colleagues; the pressure from scholars/researchers; specific disciplines) or not to participate (e.g., cost of monographs, budget restraints, and other priorities, such as investing in local repositories, focusing on journals rather than books, etc.).

While the study touches on some previous studies that focused on OA journals to understand the complexity of OA's perceptions better, the study's focus is not OA journals or their impact or the business models associated with OA journals. The study's sole focus is OA monographs, specifically those related to the 'crowdfunding' initiatives. Its main theoretical contribution is achieved by critically considering the alternative 'crowdfunding' model for publishing OA monographs from the basis of the innovation diffusion theory (IDT), which seeks to explain how, why, and at what rate new ideas and innovation spreads and the crowdfunding approach to financing OA monographs is considered an innovative business model in the OA space. Therefore, the sustainability of this model is approached from the aspect of using data analytics and the aspect of institution profiling, especially in clarifying dilemmas about OA monographs and institutions that financially support or do not support the crowdfunding model designed to finance them. In summary, the study examines the possibility that the sustainability of the crowdfunding model depends on the use and impact of scholarly monographs at the local (rather than global) level and the support of the most affluent, research-intensive institutions.

Research questions and hypotheses

In order to fully grasp the sustainability of the library crowdfunding business model for OA monographs, it is important to understand the 'types' of 'adopters' identified by the innovation diffusion theory (Rogers, 1995) and examine how they have contributed or not contributed to 'diffusing' this particular business model for OA publishing. The study proposes that by examining the 'actions' as well as 'characteristics' of the various types of adopters (i.e., libraries), including Early Adopters, Early Majority, Late Majority, and Laggards, in the context of library crowdfunding, the study's key research questions may be answered:

- Which European institutions see the highest usage of OA monographs funded through KU's crowdfunding model? Are those the institutions that finance it? To what extent?
- What types of institutions support the crowdfunding of OA monographs by actively and regularly (or often) participating each year? What are their attributes, particularly related to their overall reputation, the recognition of their scholars, their size, and their loyalty to specific disciplines?
- What are the key motives behind these institutions' participation and support of collaborative/crowdfunding initiatives for OA monographs?
- What are some of the key factors contributing to the sustainability of OA monograph publishing via library crowdfunding based on the types of institutions that support the model and based on librarians' perceptions and viewpoints?

The hypotheses at the start of research include:

- The institutions that see the highest usage of OA monographs are generally the institutions that participate in library crowdfunding the most.
- Large, research-intensive universities that rank high in terms of their overall reputation and research output allocate more funding for OA monograph publishing than those that rank lower.
- Librarians are most keen on participating in crowdfunding initiatives if they have tangible proof that the content is relevant in their communities.
- The key factors contributing to the sustainability of OA monograph publishing include, among others: usage, reputation, local impact, and affordability (i.e., the cost of OA monographs).

These assumptions are primarily influenced by previous studies and predictions of scholars who have monitored OA and the progress of its many facets over the years (reviewed in Chapter 2).

Methodology

This research is conducted as an *instrumental case study* that provides insight into how and why the crowdfunding model for OA monographs is supported (or not supported) by a wide range of institutions in Europe. The study follows the 'actions' and 'characteristics' of the institutions supporting and not supporting the publishing of OA monographs via Knowledge Unlatched's annual crowdfunding initiative in 167 institutions across Europe, including the countries of Western and Northern Europe that are known to participate in crowdfunding initiatives the most (e.g., UK, Netherlands, Germany, Sweden, Finland, and Norway) and in Eastern Europe where institutions do not or rarely participate in such projects (e.g., Poland, Czech Republic, Slovakia, Hungary, Latvia, Lithuania, Estonia, Serbia, Croatia), to gain accurate insight into the available analytics for the period between January 2017 through September 2019 that reveal where the most usage takes place and how it corresponds to those institutions' participation or non-participation in crowdfunding. Since the launch of the Knowledge Unlatched pilot in 2013, information on the institutions participating in the annual crowdfunding campaign has been publicly available and details on the funds donated annually by the institution.

The main goal of the quantitative study is to determine the factors that may contribute to the sustainability of one particular business model for publishing OA monographs: collaboration through crowdfunding by libraries. While this business model is thoroughly described in a large number of scholarly articles, it has not been studied in depth to determine the key factors that contribute to its sustainability. In order to identify those factors, this quantitative study aims to 'profile' the institutions that regularly participate in crowdfunding by considering the following:

- Which institutions are seeing the highest usage?
- Do the institutions with the highest usage set aside more funds for collaborative projects than those who do not but still benefit from free access to OA content?
- What do the institutions seeing the highest usage have in common?

- What characteristics of the institutions see the highest usage in terms of world ranking and research output?

The quantitative analysis is divided into three parts: Part 1 is focused on using OA monographs, with data drawn from the widely used and well-known library platform JSTOR, while Part 2 is focused on institution profiles by examining their rankings according to three primary world ranking sources. As discussed in the studies that have attempted to measure the impact of OA monographs over the past few years (2016-2020), information about monograph usage is crucial to understand their current relevancy and long-term sustainability. Usage data is not just crucial for the authors to see if, how, and where their work is being used by other researchers or for the publishers to have solid proof that it is worth adapting their businesses to accommodate the publishing of OA monographs. It is also vital to those who fund the publishing of OA monographs, and this, of course, includes libraries. Funding authorities—whomever they may be—are eager to measure and quantify the impact (Montgomery, 2013) because everyone wants proof that what is funded is being used.

To gain deeper insight into librarians' perceptions of collaborative OA business models for monographs, a survey of librarians across Europe with knowledge of or dealings with OA business models was also conducted (Part 3). The goal of the anonymous, multi-national survey of librarians across Europe was to determine their attitudes about and perceptions of global collaborative OA models and their motivations for supporting (or not supporting) them. Between January 25th and February 21st, 2021, 160 librarians took part in the survey, of whom 80 percent identified themselves as being directly and actively involved with OA initiatives at their institutions, while the remaining 20 percent were not directly involved but remained interested in its development.

Key findings

Libraries and the institutions they serve need a deeper insight into the impact of the use or non-use of scholarly monographs in their institutions so that they may better understand the benefits they have from supporting global crowdfunding campaigns. The sustainability of this type of business model is only achieved if the institutions worldwide support it in significant numbers by

allocating funds for it on a regular basis. If libraries do not participate in crowdfunding, the initiatives of this type cannot survive long-term, regardless of the quality of the content they may provide or the determination of publishers and scholars to participate.

This research provides librarians, academic institutions, and scholarly publishers with a clear insight into the use of OA monographs in institutions that participate (or do not participate) in crowdfunding models and the motives for supporting such models, thus contributing to discussions of the sustainability of library crowdfunding in this context. The study answers some of the crucial questions asked regarding OA monograph publishing via crowdfunding: Who supports OA monograph crowdfunding models the most and why? and What steps may be taken to ensure the sustainability of such a model and the continued publishing of OA monographs?

The study's key findings are discussed in the final chapter, which provides a concluding summary of research results and recommendations for further research. Based on the research methods, the following conclusions were reached regarding the key factors contributing to the sustainability of the crowdfunding model for OA monographs:

- Usage of OA monographs is the strongest in the institutions that participate in crowdfunding vs. the institutions that do not participate, but among the institutions that finance KU's publishing of OA monographs loyally and participate in crowdfunding every year (in this case, nine institutions in several countries), usage data vary—from those that show above-average usage numbers to those that show below-average usage numbers.
- Reliable factors that help us understand the 'types' of institutions that support crowdfunding include the institution's world ranking, research output score, citation impact, and international score. Of these, the most reliable factors are the institution's world ranking and citation impact.
- The institutions that support crowdfunding, therefore, may be described as follows: they are highly ranked overall, they stand out for their scholarly contributions, particularly concerning research output, citation impact, and international outlook. Student size and faculty size (i.e., the size of those institutions in terms of the number of students and the number of faculty) may be additional factors in determining an institution's tendency to support crowdfunding, but they are not the key indicator.

- Scholarly community-driven OA initiatives focused on specific disciplines tend to get the most support from institutions with solid reputations in that scholarly discipline or field.

Based on the results of the survey, the following conclusions were reached:

- Librarians still want to support OA monographs in principle and because of the belief in the basic tenets of the OA movement
- Library budgets and the cost of OA monographs are still the main reasons libraries do not allocate more funds for crowdfunding initiatives
- Librarians do not see the usage of OA monographs at their institutions as the deciding factor contributing to their decision whether to support crowdfunding initiatives.
- The relevance of the disciplines that institutions are invested in and the awareness that the works of their scholars are crowdfunded are stronger motivators for libraries to participate in crowdfunding than usage.

Recommendations

This study focuses on examining some factors that may contribute to the sustainability of the library crowdfunding model, including usage of academic e-books at institution level and the rankings of participating and non-participating institutions. It also provides current views of librarians on this particular model and their perceptions of what it will take to sustain the crowdfunding model, including lowering the cost of monographs, allocating more funding, and showing support for the disciplines that matter locally and for the scholars affiliated with participating institutions. Future studies of the library crowdfunding model should also examine other relevant factors not covered in this study, including, for example, the impact of various Creative Commons licenses. The questions to ask here include: Is there a relationship between the type of open license and the institutions' tendencies to fund OA monographs? and Which open licenses do librarians want to support the most and why?

Given that the survey reflects the importance of author backgrounds as a factor contributing to institutions' willingness to support the publishing of OA monographs, more insight should be given into the relevance of the authors' background (affiliation), and further studies could

investigate if institutions are more likely support OA monograph initiatives if their collections feature the works of their local authors. Likewise, are institutions more likely to support OA monographs if they are published by locally relevant publishers (e.g., those that are based in the same area or university presses tied to the same institutions).

Lastly, since the survey only covered the voices of librarians and not the voices of scholars and publishers on this topic, future studies should investigate the thoughts of those who create and distribute content (not only those who fund it) to determine their views on the library crowdfunding model and their willingness to contribute content to such initiatives. After all, every part of the scholarly ecosystem contributes to the success of every scholarly publishing model. As vital as librarians are in the ecosystem of the OA movement—particularly in the realm of OA monographs and crowdfunding—without the support from quality scholars and publishers willing to contribute relevant content to be funded, OA monographs remain a scholarly format whose future will remain uncertain and debatable.

PROŠIRENI SAŽETAK

Znanstvenim e-knjigama u otvorenom pristupu (*Open Access*), koje su također znane kao monografije u otvorenom pristupu, i koje su glavna tema ove disertacije, trebalo je neko vrijeme da pronađu svoje mjesto u istraživanjima. One su po mnogočemu u zaostatku u smislu otvorenosti i dostupnosti u odnosu na znanstvene časopise u otvorenom pristupu, posebno u disciplinama humanističke i društvene znanosti (Adema, 2019), koje se najviše oslanjaju na format monografije za distribuciju znanstvenih istraživanja. O razvoju monografija (tj. akademskih knjiga) u otvorenom pristupu može se raspravljati u raznim kontekstima i iz različitih aspekata, jer su do danas akademska izdavačka industrija i znanstvena zajednica sudjelovale u raznim *Open Access* inicijativama, testirali niz novih i alternativnih poslovnih modela, učili iz pokušaja i pogrešaka, i zalagali se za financiranje *Open Access* sadržaja kako bi on bio slobodno dostupan što većem broju korisnika. Velika Britanija i Europa prednjače u razvoju modela za *Open Access* monografije. Prva dva izdavača *Open Access* monografija osnovana su u Londonu 2008. godine: Open Book Publishers (OBP) i Open Humanities Press (OHP), oba fokusirana na humanističke znanosti koji svoju održivost demonstriraju do danas (Grimme i dr., 2019).

U ovom se istraživanju pojam ‘monografija’ odnosi na znanstvenu knjigu značajne duljine (otprilike 80,000 riječi) koju je detaljno i s velikim razumijevanjem napisao/la jedan ili više znanstvenika o određenoj temi ili o određenom aspektu te teme. Stoga je pojam ‘monografija’ u ovom istraživanju sinonim pojmu ‘znanstvena knjiga.’ Studija koristi istu široku definiciju monografije koja se koristila u ranijim studijama (OAPEN-UK, 2015), pa stoga uključuje razne znanstvene knjige jednog ili više autora. Takodjer, pojam ‘e-knjiga’ je sinoniman pojmu ‘knjiga u otvorenom pristupu,’ jer su knjige u otvorenom pristupu zapravo knjige u digitalnom (a ne printanom) obliku. Drugim riječima, bilo koja diskusija knjiga ili monografija u otvorenom pristupu automatski podrazumijeva e-knjige jer su *Open Access* monografije ‘otvorene’ i besplatne samo u digitalnom obliku.

Sve je veći interes za ulaganjem u infrastrukture *Open Access* monografija, kako na međunarodnim, tako i na nacionalnom nivoima. *Open Access* monografija se kao znanstveni

format pojavila kao živahna tema koja je uvelike pobudila interes *Open Access* pokreta, kao i izdavača, ustanova, sveučilista i raznih donatora (JISC, 2014). Štoviše, posljednjih je godina jedna od najdominantnijih tema na konferencijama usmjerenim na *Open Access* izdavaštvo, a knjižnice i nakladnici eksperimentiraju s održivošću različitih *Open Access* poslovnih modela kako bi utvrdili na koji način najučinkovitije objaviti i financirati *Open Access* monografije za dobrobit znanosti. Srž rasprava o *Open Access* monografijama inzistiranje je (znanstvenika i nakladnika) na održavanju rigoroznih standarda recenziranja, pravilnom oglašavanju i distribuciji monografija nakon objavljivanja, potvrdama o visokoj kvaliteti sadržaja i formata i ispravnom korištenju odgovarajućih *Creative Commons* licenci koje omogućavaju da se djela distribuiraju u nekomercijalne (a ne komercijalne) svrhe (Elliott, 2015) i u skladu sa ograničenjima tih licenci.

U europskim zemljama također raste interes za razumijevanje održivosti *Open Access* monografija. Dobar primjer je inicijativa *Plan S* pokrenuta u rujnu 2018. godine, a podržava je *cOAlition S*, međunarodni konzorcij organizacija za financiranje istraživanja i istraživačkih organizacija. Prema *Planu S,* znanstvene publikacije koje proizlaze iz istraživanja financiranih javnim potporama moraju se objavljivati u *Open Access* časopisima ili platformama, počevši od 2021. Iako se Plan S odnosi na recenzirane znanstvene članke, cOAlition S planira do kraja 2021 dati izjavu o načelima Plana S u odnosu na monografije. European Science Foundation na svojoj web stranici naglašava: “Podrazumijeva se da će vremenski okvir za postizanje otvorenog pristupa za monografije i poglavlja knjiga biti duži i zahtijeva zaseban i pravni postupak” (European Science Foundation, 2021).

Kako bi se *Open Access* knjige (tj. monografije) objavljivale profesionalno i u skladu s akademskim protokolima, testiraju su različiti poslovni modeli, da bi se utvrdilo na koji način objavljivati *Open Access* knjige a da je takav model ujedno financijski održiv za autore i izdavače s jedne strane, te istraživače, korisnike i znanstvenike s druge strane (Gatti & Mierowsky, 2016). Pitanje koje se nameće jest: Na koji način objaviti *Open Access* monografije i učiniti ih dostupnima globalno, bez ograničenja, a da se pritom na odgovarajući način kompenziraju autori i njihovi nakladnici, kao i ne dovodi u pitanje kvaliteta naslova ili integritet i ugled autora i nakladnika?

Do sada se znanost manje bavila istraživanjem utjecaja *Open Access* monografija, osobito onih objavljenih skupnim financiranjem (*crowdfunding*) putem knjižnica, jer je ovaj poslovni

model u kontekstu otvorenog pristupa još uvijek relativno nov i kao takav opisuje se kao alternativan pristup (Reinsfelder, 2018). Neki od najranijih *library crowdfunding* pilota pokrenuti su prije nekoliko godina (Leach-Murray, 2017), uključujući inicijative poput Knowledge Unlatched (Europa) i UnGlue.It (Sjedinjene Američke Države). Nadalje, *Open Access* modele su do sada najviše podržavale prirodne znanosti (STEM) i istraživali su se u kontekstu časopisa vezanih za prirodne znanosti, za razliku od humanističkih i društvenih znanosti (HSS), koje su tradicionalno više povezane uz monografije (Eve, *OA & Humanities*, 2014). Troškovi objavljivanja HSS monografija znatno su veći od troškova objavljivanja STEM članaka i časopisa, jer su monografije dulji radovi koji zahtijevaju veći urednički i produkcijski angažman od strane autora i izdavača (Eve, *OA & Humanities*, 2017). Dodatni izazov za *Open Access* monografije je taj što se HSS discipline znatno manje financiraju od STEM disciplina (Davies et al., 2014).

Tijekom posljednjih godina pojavilo se nekoliko poslovnih modela za objavljivanje *Open Access* monografija (npr. model plaćanja autorskih troškova, novi sveučilišni tisak, *freemium* model, model suradničkog jamstva, model skupnog financiranja, model zajednice). Ono što odmah primjećujemo uspoređujući postojeće modele za *Open Access* monografije (Collins et al., 2015; Speicher et al., 2018) jest da ne postoji jednoznačan pristup financiranju *Open Access* monografija, odnosno da postoje različite terminologije koje definiraju modele koji se preklapaju na mnogo načina. Također se može reći da su se neki modeli razvili kako bi apsorbirali osobine drugih modela, koji su u jednom trenutku imali izraženije karakteristike, ali su se vremenom počeli spajati s drugima. Dobar primjer je model suradnje (*collaboration* model), koji se također naziva modelom skupnog financiranja, kao i modelom ‘suradničkog osiguranja,’ i ‘knjižničarskim’ model, budući da je taj model knjižnice postavio u središte djelatnosti kolektivnog financiranja. Činjenica da još uvijek nije postignut konsenzus o tome kako jasno razlikovati postojeće poslovne modele dodatno svjedoči i raznolikosti u načinu objavljivanja *Open Access* monografija i služi kao dodatna potvrda du se navedeni modeli smatraju novim i alternativnim nakladničkim pristupima.

Globalna znanstvena zajednica često potvrđuje važnost suradnje i učinkovite komunikacije u cijelom ekosustavu izdavaštva (Deegan, 2017), i objavljivanje *Open Access* monografija i razvoj učinkovitih poslovnih modela za njihovo objavljivanje i ‘otvaranje’ masama

nije iznimka. ‘Kolektivna akcija’ (*collective action; collaboration*) u svrhe izdavanja *Open Access* monografija ima smisla onoliko koliko ima smisla kada knjižnice udružuju snage u pružanju podrške projektima koji nisu nužno povezani s otvorenim pristupom. Stoga je princip isti. Suradnja se odnosi na udruživanje snaga i na dijeljenje resursa. Iz tog razloga, tijekom ovog istraživanja, *crowdfunding* model se opisuje na razne načine i zamjenjivim pojmovima, uključujući zajedničko financiranje, grupno financiranje, zajedničko financiranje knjižnica, kolektivno financiranje i kolektivno jamstvo, što u suštini znači isto: knjižnice se udružuju da bi financirale objavljivanje *Open Access* monografija u korist globalne znanstvene zajednice.

Podržavanje objavljivanja *Open Access* monografija putem skupnog financiranja privukao je veliku pozornost kao vodeći alternativni model u posljednjih nekoliko godina. Prema ovom modelu, sveučilišta, istraživačke i nacionalne knjižnice širom svijeta udružuju snage kako bi svake godine ‘otvorile’ određeni broj znanstvenih knjiga u digitalnom formatu. Prikupljeni novac dijeli se nakladnicima i autorima kako bi se izbjegle autorske naknade i znanost bila globalno dostupna. U tradicionalnom izdavaštvu, troškovi povezani s objavljivanjem djela *Open Access* često su odgovornost samih autora koji plaćaju izdavačima autorske naklade (*author fees*) da objavljuju naslove u suradji s uglednim nakladnicima i koristeći *Creative Commons* licence. Iz tog razloga institucije autora su često motivirane da izdvajaju sredstva za pokrivanje troškova svojih znanstvenika (Reinsfelder, 2018; Beaubien, 2016).

Ciljevi istraživanja

Crowdfunding inicijative (ili projekti) za financiranje monografija u otvorenom pristupu pozivaju institucije i nakladnike na suradnju u korist šire globalne zajednice. Nekolicina studija se do sada bavila učinkovitosti različitih poslovnih *Open Acceess* modela općenito, a neke su se studije izričito usredotočile na objavljivanje monografija u otvorenom pristupu. Međutim, pitanja koja se još uvijek postavljaju uključuju:

- Koliko su učinkovite inicijative za grupno financiranje ove vrste?
- Koji faktori mogu pridonijeti dugoročnoj održivosti takvih inicijativa?
- Koji su glavni razlozi zbog kojih knjižnice sudjeluju ili ne sudjeluju u takvim inicijativama?

- Sudjeluju li knjižnice zbog koristi koju ima globalna zajednica ili im je korist lokalne zajednice prioritet?
- Koje vrste institucija podržavaju financiranje? Koje su njihove osobine i karakteristike?

U ovom istraživanju izrazi '*crowdfunding'* i 'suradnja' koriste se naizmjenično i raspravljaju se isključivo u kontekstu poslovnog modela koji uključuje knjižnice. Drugim riječima, ova studija ispituje *crowdfunding* model samo kada su njegovi sudionici knjižnice (ne pojedinci, izdavači ili autori) i kada služe za omogućavanje objavljivanja monografija. To znači da *crowdfunding* inicijative poput Knowledge Unlatched u osnovi utjelovljuju barem tri različita modela u jednom: model knjižnice, suradnje i skupnog financiranja jer pozivaju *knjižnice* na *suradnju* sudjelovanjem u godišnjoj crowdfunding kampanji.

Istraživanje ispituje održivost ovog poslovnog modela kako bi se ustanovili ključni faktori koji mogu doprinijeti njegovoj dugoročnoj održivosti koji prethodno nisu proučavani (npr. korištenje *Open Access* monografija u institucijama koje sudjeluju ili ne sudjeluju u *crowdfunding*-u i njihova usporedba, njihov svjetski rang, učestalost njihovih znanstvenih istraživanja, njihova veličina, i njihova međunarodna perspektiva). Drugim riječima, ova studija istražuje faktore koji određuju stupanj uspješnosti suradničkog modela. Jedan od glavnih ciljeva je uspostaviti odnos između korištenja *Open Access* znanstvenih knjiga u širokom spektru europskih institucija i odluka tih institucija da sudjeluju u globalnim kampanjama za financiranje ove vrste.

Studija istražuje složenost ovog alternativnog modela s aspekta analitike dostupne na *hosting* platformi JSTOR. Cilj je utvrditi imaju li institucije koje dodjeljuju najviše sredstava za *crowdfunding* najznačajniju korist u pogledu korištenja monografija i ima li uvid u dostupnu analitiku pozitivan utjecaj na odluke tih institucija da u budućnosti kontinuirano podrže ovakve modele. Namjera je također utvrditi razlike u korištenju monografija podržanih kroz projekte financiranja između institucija koje sudjeluju u financiranju i onih koje ne sudjeluju.

Studija također proučava institucije koje redovito sudjeluju kako bi se utvrdile njihove zajedničke karakteristike. U svrhu ovog uvida, studija se oslanja na analizu podataka iz tri izvora: THE World Rankings (Times Higher Education), Academic Ranking of World University (ShanghaiRanking Consultancy) i QS World University Rankings (QS Quacquarelli

Symonds). Studija kritički ispituje različite ocjene koje su ta tri izvora dodijelila institucijama, uključujući ukupnu ocjenu i svjetski rang, ocjenu za učestalost raznih istraživanja, ocjenu za citiranost i ocjenu za međunarodne odlike sveučilista (tj. faktori koji instituciju čine glabalnom a ne lokalnom). Studija također profilira institucije na temelju broja studenata i veličine akademske zajednice, te sklonosti institucija da podupiru OA inicijative koje su usko povezane sa pojedinim znanstvenim disciplinama.

Cilj je također identificirati dodatne faktore koji utječu na odluke knjižnica da sudjeluju u grupnom financiranju monografija. 'Ostali' faktori su obrazloženi kroz rezultate anonimne ankete u kojoj je sudjelovalo 160 knjižničara u širokom spektru europskih institucija. Anketa nadopunjuje rezultate iz kvantitativnog dijela istraživanja. Kao takva, istražuje dodatne faktore koji pridonose odlukama institucija da sudjeluju u kampanjama grupnog financiranja (npr. samo načelo otvorene znanosti, utjecaj znanstvenika, važnost određenih disciplina) ili ne sudjelovanje (npr. troškovi monografija, financijska ograničenja i drugi prioriteti, poput ulaganja u lokalne repozitorije i fokus na financiranje znanstvenih časopisa).

Iako se studija dotiče prethodnih studija koje su bile usredotočene na znanstvene časopise, kako bi bolje razumjele složenost percepcija vezanih uz otvoren pristup, fokus ove studije nisu *Open Access* časopisi, njihov utjecaj i poslovni modeli. Glavni i jedini fokus studije su monografije (znanstvene knjige) u otvorenom pristupu, posebno one povezane s inicijativama grupnog financiranja. Njezin glavni teorijski doprinos postiže se kritičkim razmatranjem alternativnog modela *crowdfunding-a* na osnovi teorije difuzije inovacija (*Information Diffusion Theory*) koja pokušava objasniti kako, zašto i kojim tempom se nove ideje i inovacije šire, a model grupnog financiranja monografija smatra se inovativnim poslovnim modelom u prostoru otvorenog pristupa. Stoga se održivosti ovog modela pristupa s aspekta korištenja analitike podataka i aspekta profiliranja institucija, posebno u razjašnjavanju nedoumica oko monografija i institucija koje financijski podržavaju ili ne podržavaju *crowdfunding* model osmišljen za njihovo financiranje. Ukratko, studija ispituje mogućnost da održivost ovoga modela ovisi o korištenju knjiga u otvorenom pristupu na lokalnoj (a ne globalnoj) razini i o podršci najutjecajnijih, istraživački-orijentiranih sveučilišta i institucija.

Istraživačka pitanja i hipoteze

Da bi se u potpunosti razumijela održivost ovog poslovnog modela, važno je razumjeti 'tipove' usvojitelja (*adopters*) identificiranih teorijom difuzije inovacija (Rogers, 1995) i ispitati na koji su do danas način doprinijeli ili nisu doprinijeli difuziji ovog modela. Studija predlaže da se ispitivanjem odluka o sudjelovanju, kao i karakteristika različitih vrsta usvojitelja (tj. institucija)—uključujući rane usvojitelje (Early Adopters), ranu većinu (Early Majority), kasnu većinu (Late Majority) i one koji odbijaju inovaciju u znanstvenoj zajednici (Laggers)—u kontekstu financiranja od strane knjižnica prouči mogu li se dobiti odgovori na ključna istraživačka pitanja:

- Koje europske institucije imaju najveće korištenje monografija financiranih putem *crowdfunding* kampanja? Jesu li to institucije koje sudjeluju u financiranju? U kojoj mjeri?
- Koje vrste institucija podržavaju grupno financiranje monografija redovitim (ili čestim) sudjelovanjem? Koji su njihovi atributi, posebice njihov ugled, svjetski rang i odanost određenim disciplinama?
- Koji su ključni motivi ovih institucija vezani uz podržavanje *Open Access* monografija?
- Koji su neki od ključnih faktora koji doprinose održivosti ovog modela na temelju analitike korištenja i vrsta institucija i na temelju percepcija knjižničara (anketa)?

Hipoteze na početku istraživanja uključuju sljedeće pretpostavke:

- Institucije koje najviše sudjeluju u grupnom financiranju su institucije u kojima se najviše koriste monografije u otvorenom pristupu.
- Velika i visoko rangiranja sveučilišta koja visoko kotiraju u smislu reputacije i resurca izdvajaju više sredstava za objavljivanje *Open Access* monografija od onih koje imaju niži rang i skromnija sredstva.
- Knjižničari najviše žele sudjelovati u *crowdfunding* inicijativama kada imaju dokaz da je sadržaj relevantan u njihovim zajednicama.

- Ključni faktori koji doprinose održivosti ovog model uključuju korištenje, ugled institucije, lokalni utjecaj i sama cijena sudjelovanja u grupnom financiranju.

Na ove pretpostavke prvenstveno utječu prethodne studije i predviđanja znanstvenika koji su pratili napredak monografija u otvorenom pristupu zadnji niz godina.

Metodologija

Ovo se istraživanje provodi kao *instrumentalna studija slučaja* koja pruža uvid u to kako i zašto model grupnog financiranja za monografije podržava (ili ne podržava) širok spektar institucija u Europi. Studija prati djela, odluke i karakteristike institucija koje podržavaju ili ne podržavaju objavljivanje *Open Access* monografija putem godišnje inicijative za grupno financiranje pod nazivom Knowledge Unlatched u 167 institucija, uključujući zemlje zapadne i sjeverne Europe koje često sudjeluju u *crowdfunding* inicijativama (npr. Velika Britanija, Nizozemska, Njemačka, Švedska, Finska i Norveška) i u istočnoj Europi gdje institucije ne sudjeluju ili rijetko sudjeluju (npr. Poljska, Češka, Slovačka, Mađarska, Latvija, Litva, Estonija, Srbija, Hrvatska), kako bi se dobio detaljan uvid u dostupnu analitiku za razdoblje između siječnja 2017. do kraja rujna 2019. Od pokretanja pilota Knowledge Unlatched 2013. godine, podaci o institucijama koje sudjeluju u godišnjoj *crowdfunding* kampanji javno su dostupni, kao i detalji o sredstvima koje institucije doniraju na godišnjoj razini.

Glavni cilj istraživačkog dijela studije je utvrditi faktore koji mogu doprinijeti održivosti ovog modela. Iako je model temeljito opisan u velikom broju znanstvenih članaka, do sada nije detaljno proučen kako bi se utvrdili ključni faktori koji pridonose njegovoj održivosti. Kako bi se identificirali ti faktori, kvantitativna analiza bavi se detaljnim profiliranjem institucija koje redovito sudjeluju u *crowdfundingu* uzimajući u obzir sljedeće:

- Koje institucije najviše koriste knjige u znanstvenom pristup?
- Izdvajaju li institucije s najvećim korištenjem više sredstava za suradničke projekte od ostalih?
- Koje su zajedničke karakteristike institucija koje pokazuju najviše korištenje *Open Access* monografija?

- Koje su zajedničke karakteristike institucija koje najviše sudjeluju u financiranju iz aspekta njihovog ranga i dostignuća?

Kvantitativna analiza podijeljena je u tri dijela: Prvi dio usredotočen je na korištenje OA monografija, s podacima iz poznate knjižnične platforme JSTOR, dok je drugi dio usmjeren na profiliranje institucija ispitivanjem njihovog svjetskog ranga prema tri primarna izvora. Kao što se raspravljalo u studijama koje su pokušavale izmjeriti utjecaj *Open Access* monografija tijekom posljednjih nekoliko godina, informacije o korištenju monografija ključne su za razumijevanje njihove relevantnosti i dugoročne održivosti. Podaci o korištenju nisu samo bitni kako bi autori mogli pratiti hoće li, kako i gdje njihov rad koristiti drugi istraživači već su bitni kako bi izdavači imali čvrste dokaze da se isplati prilagoditi svoje poslovanje monografijama u otvorenom pristupu. Također je bitno za one koji financiraju izdavanje, a to su knjižnice.

Da bi se stekao dublji uvid u percepciju knjižničara o ovom modelu, provedena je anonimna anketa sa knjižničarima diljem Europe kako bi se utvrdio njihov stav i percepcija modela, kao i njihove glavne motivacije za sudjelovanje. Između 25. siječnja i 21. veljače 2021. godine u istraživanju je sudjelovalo 160 knjižničara, od kojih se 80 posto izjasnilo da su izravno i aktivno uključeni u inicijative ove vrste u svojim institucijama, dok preostalih 20 posto nije izravno uključeno, ali je upuceno u odlike modela i zainteresirano je za njegov daljnji razvoj.

Rezultati istraživanja

Ovo istraživanje omogućuje knjižničarima, institucijama i izdavačima jasan uvid u korištenje *Open Access* monografija u institucijama koje sudjeluju (ili ne sudjeluju) u modelima grupnog financiranje, kao i uvid u glavne motive za potporu takvim modelima, čime se doprinosi raspravi o održivosti *crowdfunding* modela monografija u otvorenom pristupu u kontekstu knjižnica. Studija odgovara na ključna pitanja koja se postavljaju u vezi ovoga modela: Tko najviše financiski podržava monografije u otvorenom pristupu? Koji se koraci mogu poduzeti kako bi se osigurala održivost modela i kontinuirano objavljivanje *Open Acceses* monografija? Ako knjižnice ne sudjeluju u grupnom financiranju u velikom broju, inicijative ove vrste ne mogu dugotrajno opstati, bez obzira na kvalitetu sadržaja ili odlučnost izdavača i znanstvenika da

sudjeluju. Drugim riječima, održivot modela je usko vezana uz sudjelovanje institucija, tj. njihovih knjižnica.

Na temelju metoda primijenjenih u kvantitativnom istraživanju, doneseni su sljedeći zaključci u vezi s ključnim faktorima koji doprinose održivosti *crowdfunding* modela za monografije u otvorenom pristupu:

- Korištenje monografija najizraženije je u institucijama koje sudjeluju u grupnom financiranju nasuprot institucijama koje ne sudjeluju, ali među institucijama koje financiraju izdavanje monografija svake godine, podaci o korištenju se razlikuju; neke pokazuju nadprosječno, dok ostale pokazuju ispodprosječno korištenje.
- Pouzdaniji faktori koji predviđaju institucije koje podržavaju *crowdfunding* uključuju svjetski rang institucije, kvalitet njenih istraživanja, utjecaj njenih znanstvenika i njena međunarodna perspektiva (‘globalnost’). Najpouzdaniji factor su svjetski rang institucije i citiranost njenih znanstvenika.
- Stoga se institucije koje podupiru grupno financiranje mogu opisati na sljedeći način: visoko su rangirane, ističu se svojim znanstvenim doprinosima, posebno u pogledu istraživanja, često citiranih znanstvenika i međunarodnih izgleda. Broj studenta i nastavnika (tj. veličina tih institucija u smislu broja redovitih studenata i broja zaposlenih znanstvenika) mogu biti dodatni čimbenici u određivanju tendencije institucije da podržava grupno financiranje, ali oni nisu glavni pokazatelji.
- Inicijative usredotočene na određene discipline imaju tendenciju da dobiju financijsku podršku od uglednih institucija koje uvelike ulazu u određenu disciplinu.

Na temelju rezultata ankete donešeni su sljedeći zaključci:

- Knjižničari i dalje žele podržati *Open Access* monografije zbog njihove vjere u osnovna načela svjetskog *Open Access* pokreta.
- Budžeti knjižnica i visoke cijene monografija i dalje su glavni razlozi zbog kojih knjižnice ne izdvajaju sredsta za sudjelovanje u grupnom financiranje monografija u otvorenom pristupu.

- Knjižničari ne smatraju da je korištenje monografija u svojim institucijama odlučujući faktor koji pridonosi njihovoj odluci hoće li podržati grupno financiranje.
- Relevantnost disciplina u koje institucije ulažu kao i podrška lokalnih znanstvenika snažniji su motivator za sudjelovanje od podataka o korištenju.

Preporuke

Ova se studija usredotočila na ispitivanje određenih faktora koji mogu pridonijeti održivosti modela grupnog financiranje za knjižnice, uključujući korištenje znanstvenih e-knjiga na razini institucija i rangiranje istih institucija u različitim područjima. Također pruža trenutne stavove knjižničara o ovom modelu i njihovu percepciju o tome što je potrebno za njegovu održivost, uključujući smanjenje cijene monografija i pružanje potpore lokalno-važnim disciplinama i znanstvenicima. Buduće studije ovog modela trebaju također ispitati druge relevantne faktore koji nisu obuhvaćeni u ovom istraživanju, uključujući, na primjer, utjecaj različitih Creative Commons licenci. Pitanja koja ovdje treba postaviti uključuju: Postoji li veza između vrste otvorene licence i tendencija institucija da financiraju monografije u otvorenom pristupu? Koje licence znanstvenih e-knjiga u otvorenom pristupu knjižničari podržavaju i zašto?

S obzirom na to da je anketa odražavala važnost autorskog podrijekla kao važnog faktora koji pridonosi spremnosti institucija da podrže objavljivanje *Open Access* monografija, trebalo bi dati više uvida u relevantnost samih autora, a daljnja bi istraživanja mogla ispitati podržavaju li institucije ovakve inicijative ako su usko vezane uz knjige svojih lokalnih autora (tj. znanstvenika). Isto tako, da li će institucije podržati *Open Access* monografije ako ih objavljuju lokalno relevantni izdavači (npr. oni koji su sastavni dio sveučilišta ili lokalne znanstvene zajednice)?

Budući da anketa uključuje samo mišljenja knjižničara, a ne i mišljenja znanstvenika i izdavača o ovoj temi, buduće studije trebale bi istražiti percepcije onih koji stvaraju i distribuiraju sadržaj (ne samo onih koji ga financiraju) kako bi utvrdili njihove stavove i usporedili ih sa stavovima knjižničara. Koliko god knjižničari bili važni u ekosustavu *Open Access* pokreta—posebno u području monografija i grupnog financiranja—bez podrške

znanstvenika i izdavača koji će doprinijeti i objaviti kvalitetan sadržaj, monografije u otvorenom pristupu ostaju format čija je budućnost neizvjesna.

KEYWORDS

Open Access, Open Access e-books, Academic books, Academic e-books, Open Access monographs, Crowdfunding business model for e-books, Library models for Open Access, Sustainability of Open Access, Open Access business models, Financing of Open Access books

KLJUČNE RIJEČI

Otvoreni pristup, E-knjige u otvorenom pristupu, Znanstvene knjige, Znanstvene e-knjige, Monografije u otvorenom pristupu, Model skupnog financiranja za e-knjige; Knjižničarski modeli otvorenog pristupa, Održivost otvorenog pristupa, Biznis modeli za otvoreni pristup, Financiranje knjiga u otvorenom pristupu

CONTENTS

Chapter 1: Introduction 1

The emergence of OA monographs 6

Challenges with OA monograph 12

Collaboration and crowdfunding 14

Goals of the study 22

Key findings 24

Chapter 2: Literature Review 27

Scholar perspectives 28

Publisher perspectives 36

Librarian perspectives 46

New opportunities for libraries 52

The impact of OA monographs 58

The argument for crowdfunding 66

The next frontier 73

Chapter 3: Theoretical Framework 77

Innovation Diffusion Theory 78

Changing behaviors and attitudes 83

Research questions and hypotheses 85

Chapter 4: Methodology 88

Quantitative study 89

Population and content sample 91

Knowledge Unlatched model 95

University rankings 97

Limitations of the quantitative study 100

The survey 101

Limitations of the survey 102

Chapter 5: Research Results 104

5.1 Usage analytics 112

Most-used categories 112

Usage — interactions 114

Usage — books 118

Key usage results 121

5.2 Institution profiles 122

University world rankings analysis 123

Student size analysis 128

Faculty size analysis 132

Research output analysis 134

Citations analysis 141

International outlook analysis 147

Discipline-specific analysis 149

Key rankings results 153

5.3 Librarian survey 154

Librarians’ views and motives 157

The survey’s structure 161

Summary of the survey’s results 171

Chapter 6: Conclusion 174

Summary 176

Recommendations 179

References 181

CHAPTER 1

INTRODUCTION

Open Access (OA) scholarly literature and everything related to it—principles, ideas, formats, business models, initiatives, licenses, etc.—has been the focus of myriad studies, surveys, papers, articles, and scholarly books and a popular topic at conference panels, workshops, and webinars. OA literature may be defined as "published scholarly content that is digital, available online free of charge and free of most copyright and licensing restrictions" (Suber, 2012). However, OA literature is not—as very early arguments against it suggested—an attempt to lower scholarly standards in any way by bypassing peer-review, for example, or not adhering to rigorous editorial practices known to scholars. It is also not an attempt to violate existing copyright laws and deprive authors of income or reduce their rights over their works. And it most certainly is not an attempt to 'punish' conventional publishers whose revenues depend on sales of books and journals (Suber, 2012).

This, of course, does not imply that traditional scholarly publishing did not have problems and challenges of its own before the rise of the OA movement. The OA movement is, in many ways, a reaction to the very dysfunctions that have for decades existed in the traditional scholarly communications system (Bailey, 2007). This shared belief by many scholars worldwide who support the idea of scientific knowledge being available freely to all who need it, regardless of their location or affiliation, is "not monolithic, but diverse. Not closed, but participatory. Not dogmatic, but argumentative as it vigorously debates its future" (Bailey, 2007). Indeed, as we look at the vast and varied landscape known as OA publishing in 2021 and survey the available literature on the wide variety of OA topics, we find that the OA argument is, indeed, vigorous, and it includes scholars, publishers, and librarians alike who agree as much as they disagree on many issues. This dialog is ongoing and includes scholars, publishers, and institutions as they figure out what works and what doesn't with OA and its many facets.

The Budapest Open Access Initiative (2002), which marked the beginning of the movement toward OA (Grabowsky, 2015), first introduced the term *Open Access* as follows:

> "For various reasons…free and unrestricted online availability, which we will call open access, has so far been limited to small portions of the journal literature. But even in these limited collections, many different initiatives have shown that open access is economically feasible, that it gives readers extraordinary power to find and make use of relevant literature, and that it gives authors and their works vast and measurable new visibility, readership, and impact. To secure these benefits for all, we call on all interested institutions and individuals to help open up access to the rest of this literature and remove the barriers, especially the price barriers, that stand in the way."
>
> (Budapest Open Access Initiative, 2002)

Since its beginnings, the OA movement has been diversifying in many different ways, but its growth has not been as rapid as OA activists hoped it would be early on (Kingsley, 2015). And since its inception, OA initiatives have attracted the interests of a wide range of funders, including not only universities and other research institutions but also private funders such as the Wellcome Trust and various governmental entities (e.g., European Commission).

OA was, in fact, designed to remedy the "perceived failings" of the broken publishing system put in place decades ago, and these failings had largely to do with rising prices of scholarly journals and journal subscriptions (Bailey, 2007). For decades—even before the advent of digital publishing—journal subscription prices rose much faster than inflation and even faster than shrinking library budgets. For this reason, the story of OA in the scholarly world began with journals and institutional repositories (IRs), and many scholars still heavily associate the story of OA with journals exclusively, although other types of scholarly content have since been published OA (e.g., monographs, conference proceedings, scholarly videos). That said, what is applicable to journals is not applicable to book publishing (Adema, 2010), so any discussion of OA at this stage must make it clear that OA can no longer be discussed in general terms but only in terms that clearly delineate what applies to journals (particularly STEM journals) and what applies to scholarly books (particularly HSS monographs).

There are two most common 'routes' to publishing and making academic content OA: 'green' route and 'gold' route, but several other versions of OA publications have been identified over the years, including the 'diamond' route (Barnes, 2018). Also known as self-archiving (Collins et al., 2015), Green OA is tied to institutional repositories. To publish 'green OA' means

that a version of the publication is archived in an institutional online repository and usually does not include any of the valued work carried out by the publisher (e.g., copyediting, marketing, distribution). Green OA content can be accessed freely, but sometimes there is an embargo period (typically six months, but in some cases significantly longer), which means it is only available after the publisher has had time to make money from selling the print version of the work. Finally, the author that chooses to self-archive does not retain the copyright of the work (Barnes, 2018). Although most known for OA journals and journal articles, the IRs have moved beyond articles in recent years to also include other types of research materials, including theses and dissertations, working papers, protocols, multimedia content, blog posts, and more (Kennison, Shreeves & Harnad, 2014).

Gold OA means immediate OA publication by a journal or book publisher. Similar to green OA, permission barriers to share and reuse are removed, but contrary to green OA, the author of a work published this way retains copyright, and a fee may be charged to the author known as an Author Processing Charge (APC), or, on the book side, this fee is known as the Book Processing Charge (BPC). APCs and/or BPCs are the fees required by publishers that cover the cost of production associated with publishing a work OA. These fees are sometimes paid by the authors, but often the authors' institutions/universities absorb the cost of author fees to help support their researchers' work. The fees may also be absorbed by various other funders. While many commercial publishers require authors to pay before they can publish their work gold OA, paying a fee is not a core characteristic of gold OA (Collins et al., 2018), but rather, it is that the work is available immediately and that the author retains copyright. That said, author fees have remained to this day at the forefront of many OA-related public discussions.

One of the initial challenges with green OA has been that it was perceived as a flawed option for humanities scholars from the start (Svensson, 2013), while one of the first challenges with funded 'gold' OA has been that it got more complex over time (Cheshire, 2014). Although considered the more sustainable route of the two, gold OA has had its challenges, particularly in relation to author fees and the scholars' or their institutions' ability to pay for them (Eve, *All That Glisters*, 2014). The question that often arises: If the gold OA model—whose integral part is the implementation and execution of the APCs—prevailed over all other OA alternatives, who would be the scholars receiving the financial backing of their institutions if they were not able to

cover the APCs themselves? Is it even realistic to expect that author fees would adequately cover the production costs in the humanities and social sciences (Svensson, 2013)? The likely scenario, of course, would be that the scholars associated with well-endowed, research-intensive universities located in the most affluent parts of the world, would benefit the most. This is how the cultural backlash against possible inequality related to OA came about.

But gold OA has been slow to catch on to green OA in HSS fields. In 2014, it made up less than 15 percent of OA publications in HSS fields and less than 50 percent in STEM fields (Ferwerda, 2013). This gave rise to the emergence of the third type of OA, which attempts to solve the problem of APCs and is considered a more sophisticated version of gold OA—diamond OA. Diamond OA carries many of the characteristics of gold OA (e.g., a publication immediately available OA, with no embargo period; copyright may be retained by the author) with one key difference: there is no payment of a fee expected from the author (Barnes, 2018). In many ways, diamond OA attempts to solve what hasn't worked with gold OA and what hasn't worked has to do with the cost associated with publishing scholarly literature OA. Since its very beginnings, the OA movement did not ignore the economic costs associated with publishing scholarly literature. As Willinsky put it, the OA movement "is not operating in denial of economic realities. Rather, it is concerned with increasing access to more of the research literature for more people, with that increase measured by what is available in print and electronic formats" (2009).

* * *

Scholarly OA content may be accessed freely, but there are still restrictions in place that serve to protect the rights of authors and publishers by limiting what users can do once they access published content. This is where open licenses enter the landscape. The goal of open licenses is to ensure free and unrestricted access and sharing (without charging the user or holding him responsible for sharing scholarly literature) while also empowering and protecting authors and publishers by allowing them to retain control over their published works. These licenses do not replace copyright in any way, but rather, they are built on copyright and last for the same length of term as the work's copyright.

Open licenses come in various forms, but the most common ones used for scholarly articles and books have been designed by the Creative Commons Foundation and are enforceable in courts of law worldwide (Creative Commons, 2017). Six most common Creative Commons (CC) licenses are currently used for scholarly literature, each with a specific acronym. Each CC license clearly denotes what the author's permissions are and what users may or may not do with their work—ranging from the most liberal CC BY license to the most restrictive CC BY-NC-ND license (Creative Commons, 2017).

- CC BY license — users can distribute and use a scholarly work in any way, but they must properly credit the original author
- CC BY-NC license — users can adapt a scholarly work for non-commercial purposes only; their 'derivative' work must credit the original author, but users do not have to license their new works with the same terms as the original work
- CC BY-SA license — users may adapt a scholarly work for commercial purposes, but they must credit the original author as well as license their derivative works under the same terms
- CC BY-ND license — users may adapt a scholarly work for any purpose (commercial and noncommercial); however, users may not share their adaptation and they must attribute the original author
- CC BY-NC-SA license — users can adapt a work for non-commercial purposes only, but they must credit the original author and license their derivative works under the same terms
- CC BY-NC-ND license — users may only share the work with other users, but they must credit the original author, and they cannot change the work in any way or use it for purpose (Creative Commons, 2017)

There are valid reasons scholars should support Creative Commons licenses, particularly for the field of Humanities and Social Sciences (HSS) and long-form scholarship. Some of those benefits include, among others, the ability to quote long experts from texts (more common in HSS fields); to distribute copies of texts to students as course assignments; to archive copies for preservation; and to create translations of texts into other languages (Suber, 2012).

When choosing how to 'protect' their work, whatever its format, scholars have an array of options, but the most common (and recommended) license for OA publishers is the least restrictive CC BY license (Mudrak, NA) as it allows users (who are usually researchers) to share their work, cite from it, creative derivative works, etc. The issue of open licensing is, therefore, important in the context of protecting authors' and publishers' interests by limiting user activities.

The emergence of OA monographs

Pinfield identified dominant themes as the basis for analyzing OA publishing in 2015: Green-Gold relationship (ongoing uncertainty about the green vs. gold OA possibilities); evidence base (developing evidence to inform ongoing discussions about the growth of repositories, the growth of journals etc.); research and researchers (significant levels of disinterest, suspicion and skepticism about OA among scholars); policy (introduction of policies, or so-called 'mandates' encouraging scholars to publish OA); repositories (implementing and maintaining the infrastructure institutional repositories has brought about many challenges); journals (the emergence of OA journals and their many facets); institutions (the challenges faced by higher education institutions to remain at the center of making OA work in practice, including costs, sustainability, mandate compliance, communication and advocacy, and technical infrastructure); and impact (new ways of defining and measuring impact that go beyond citation rates, particularly 'altmetrics,' which focus on a number of measures at paper level) (Pinfield, 2015). Upon examining these 'key issues' surrounding OA publishing, one immediately notices the absence of academic books (i.e., monographs). While studies had already been under way taking into account the possibilities with OA monographs at this time, they were very much in their early stages, and it would take an additional few years before they would mature to a point where some reliable assumptions about the future of OA monographs could be formed.

Scholarly journals and IRs were, therefore, the first "delivery vehicles" that dominated the distribution of OA scholarly content (Suber, 2012). Scholarly journals, in particular, were the low-hanging fruit of the OA movement from its start (Suber, 2012). One of the reasons the OA movement initially focused on journals is because journals don't pay authors for their articles. OA appeared to be a strong argument in convincing journal authors to publish OA since they had

nothing to lose from it. In contrast, unlike journal article authors, book authors receive advance payments and royalties for their monographs. Although the payments they receive from publishers are not nearly as high as the advances and royalties earned in commercial publishing, scholarly authors do not want to lose these royalties. After all, writing a monograph is a major task requiring a lot of time, effort and dedication.

The fact that authors do not get financial compensation for writing and publishing journal articles means there is little interest to protect any income by restricting access to those articles. This, however, is the key trait of print monograph publishing (Hagerlid, 2011): access must be restricted only to those that purchase it or buy rights to access it (usually libraries). In addition, journal articles are much shorter than monographs—entire journals are much shorter than monographs, for that matter—which makes them less risky investments (Maxwell et al., 2017). Monographs, on the other hand, involve large investments involving authors, editors, marketing strategies, etc. (Mongeau, 2018).

Today, however, OA content is no longer discussed merely in relation to journals and repositories only but also in relation to many other content types. They not only include monographs and various scholarly books, but they also include theses and dissertations, government data, source code, conference slides, textbooks, teaching materials, artworks, photographs, videos, and various other multimedia (Suber, 2012).

The monograph has a unique place in the humanities scholarship, and it has been a vital medium through which the humanities achieve impact within and well beyond the scholarly community. The monograph also helps to “maintain a diverse ecology of inquiry and methods, so that the research of the humanities influences and is influenced by the work of the social and natural sciences” (Elliott, 2015). Authored books in particular (as opposed to edited collections of essays) have always had a significant place in the HSS fields, particularly in English, history, and classics. It has also been important in the fields of sociology, politics, and anthropology (Crossick, 2016).

The monograph has also been an effective vehicle for articulating sustained arguments borne out of extensive, long research, which is usually not the case with journal articles. As historian Jim Cheshire put it, “If the academic monograph is no longer valued, why do we require an 80,000-word thesis from doctoral students?” (Cheshire, 2014). In the same article, Cheshire also

predicted that the commercial e-book would encourage the fragmentation of the monograph as a full-length study, and by doing so, the OA publishing model would actually save the 'integrity' of the traditional 'print' monograph because it would encourage readers to see chapters in the context of the entire book (Cheshire, 2014).

Monographs continue to be celebrated by scholars worldwide as the 'long argument' that still maintains a central position in their career. "While researchers in the natural sciences almost exclusively rely on digital journal articles to communicate with peers and to promote their career, publishing the thesis as a printed monograph is for large parts of the humanities and social sciences still the proxy for being recognized as serious researchers." (Bargheer et al., 2017). Despite this, the HSS field has been neglected by policymakers and has had to 'fight' for a place in policy decisions (Montgomery, 2013).

* * *

OA academic, or scholarly, books (also referred to as 'monographs')—the focus of this dissertation—have taken a while to catch up to scholarly journals in the OA realm. They have trailed behind journals, particularly in HSS disciplines (Adema, 2019). Today the development of OA monographs can be discussed in many contexts and from various angles, as the academic publishing industry and the scholarly community have had time to take part in various OA initiatives, test emerging and alternative business models, learn from trial and error, and advocate for more funding. The UK and Europe have led the way on the OA monograph front, and the first two OA monograph publishers were founded and launched in London in 2008: Open Book Publishers (OBP) and Open Humanities Press (OHP), both focused on the humanities and both very active a decade later (Grimme at al., 2019)

Before going into a deeper discussion of OA monographs and their unique challenges, the term 'monograph' needs a clear definition, as there appears to be more than one acceptable way of describing it in scholarly circles. In this study, the word 'monograph' refers to a scholarly or academic book of sizable length (usually about 80,000 words) written in great detail and with great articulation by a scholar or several scholars on a single, specialized subject, or any aspect of that subject. In this regard, the term 'monograph' is synonymous with the term 'scholarly

book' or "academic book." The study uses the same broad definition of the monograph used by earlier studies (e.g., OAPEN-UK, 2015) and therefore comprises both single-authored and multi-authored scholarly books and their many incarnations. Ferwerda et al.'s 2017 study of monographs also gave a solid definition of the monograph applicable in this study. A monograph is:

> "A long, academic and peer-reviewed work on a single topic normally written by a single author and extended to also include peer reviewed edited collections by multiple authors." (Ferwerda et al., 2017)

Further, since the term *Open Access* is used exclusively in the context of e-books (books in digital format), it is quite common—standard, in fact—to no longer refer to these publications as e-books but simply as books. It is understood that if they are published OA, the books (or monographs) are available in digital format. For this reason, the term Open Access academic e-book is, throughout this study, synonymous with the term Open Access academic book or Open Access monograph.

As argued, monographs have always retained value as a way of evaluating substantive research projects (Cheshire, 2014), and when published OA, they have many advantages over non-free e-books, including, among others, these key benefits: no price barriers (free means affordable to all); wider readership (supporting equality of access regardless of one's location and affiliation); greater impact (increased use and engagement all around); and use for teaching and education purposes (Collins at al., 2015). Much has been written and debated about the 'death of the monograph' in the humanities (Thomson, 2002), but those claims now seem exaggerated because there is substantial evidence that the monograph still has a promising future (McCall & Bourke-Waite, 2016).

In order to fully grasp why monographs matter for publishing in general and for OA publishing in particular—and how OA monographs are changing the way scholarly knowledge is disseminated and shared—a wide range of issues needs to be considered to draw conclusions about the monograph's future in scholarship. Crossick places three central issues at the core of his argument, asking three questions: What makes the monograph so important to the AHSS (Arts, Humanities, Social Sciences) disciplines? Is the monograph really in crisis and what kind of crisis is it? The last question focuses specifically on OA: What is preventing the scholarly

community from moving monographs to OA more efficiently? (Crossick, 2016). These questions are discussed at great length throughout this study, particularly in Chapter 2, and particularly as related to the third question, which focuses on OA.

* * *

There has been a growing desire to invest in OA monograph infrastructures, both on international and national levels. The monograph as a scholarly form has emerged as a vibrant topic of interest for OA policy makers, funders, and stakeholders (JISC, 2014). And it has been a popular topic at conferences focused on OA publishing and the sustainability of the OA business models libraries and publishers are experimenting with to determine how to publish and fund OA monographs to everyone's benefit. At the heart of OA monograph publishing discussions are the insistence (of both scholars and publishers) on maintaining rigorous peer-review standards; properly marketing and distributing monographs once published; insisting that both content and formats are of high quality and accessible universally; and on using appropriate CC licenses that allow works to be circulated for non-commercial purposes (Elliott, 2015).

Regardless of how they are financed and the type of CC license they carry, OA monographs are freely available to researchers and users on the Internet without restriction and may be downloaded in various digital formats (e.g., as PDF or ePUB files). As with journals before them, the old demand-side model of publishing is now replaced with a new supply-side model. In the old environment, the consumer (or his or her institution) paid for the content consumed, i.e., the reader paid to access publications (demand-side model). In the new environment, the content producer (or his or her institution) pays for the services "consumed" so that the author gets his/her manuscript published and disseminated (supply-side model). In the supply-side model, scholarly literature no longer needs to be restricted, because those costs are covered by funders (Adema, 2010). In the demand-side model, most publishing costs have already been paid indirectly via library budgets, which fall under state/university institution budgets (Adema, 2010).

There is a growing interest and commitment in European countries to invest in the long-term sustainability of OA monographs. Plan S initiative for OA publishing is a good example. It

was launched in September 2018 by cOAlition S, a global consortium of research funding organizations. According to Plan S, scientific publications funded by public money must be published OA starting in 2021. As stated on the European Science Foundation's website, cOAlition S's main principle is the following: "With effect from 2021, all scholarly publications on the results from research funded by public or private grants provided by national, regional and international research councils and funding bodies, must be published in Open Access Journals, on Open Access Platforms, or made immediately available through Open Access Repositories without embargo." Although Plan S currently applies to peer-reviewed scholarly articles, the coalition plans to soon issue a statement on monographs. The foundation also states on its website: "It is understood that the timeline to achieve Open Access for monographs and book chapters will be longer and requires a separate and due process" (European Science Foundation, 2021).

To ensure that OA books are published professionally and in line with academic publishing protocols, various business models have been tested to determine how to publish OA academic books digitally (i.e., as e-books) and in ways that are financially viable for both authors and publishers on the one end and researchers who use them on the other (Gatti & Mierowsky, 2016). The question that consequently arises is: How should OA monographs be published OA and available globally without restriction in a way that adequately compensates authors and publishers and does not call into question the quality of the titles or the integrity and reputation of authors and publishers?

The quality of OA content has been one of the challenges of OA publishing, as there have been perceptions in the academic community that OA titles are inferior to those published through traditional publishing channels (Collins, 2015). This, however, has subsided in recent years, as more established publishers began joining OA initiatives and establishing their own OA publishing programs. To support the OA publishing of academic books, many university libraries have also established OA funds (as well as entire OA teams dedicated to OA projects), whose purpose is to support OA models in ways that also benefit libraries and their institutions (Beaubien, 2016) and they now extend to monographs, although still to a lesser degree.

Challenges with OA monographs

In order to understand the problems surrounding OA monograph publishing, we need to take a step back and note that the scholarly book has been in crisis since before the digital era and the OA movement. At the turn of the 21st century, libraries started to cut back on acquiring monographs due to the high costs of journals, which libraries had to keep up with to satisfy the needs of their communities. This pressed libraries to make difficult choices and decide between continuing important journal subscriptions or purchasing more academic e-books (Adema & Ferwerda, 2009). This also caused many traditional publishers to reduce their print runs, which, in turn, resulted in less books being published. The argument that HSS monograph publishing has never been fully self-sustaining is also valid, because monographs have always been in need of more funding.

The OA model addresses the monograph crisis—old and recent—in two ways: 1) by improving access and finding new sustainable business models that lower the cost of monographs and 2) by building on the existing business models used for OA journals (Ferwerda, OAPEN-NL, 2013). This means that in order for monographs to be successfully published OA, they need to be funded in ways that *sustain* and *support* various parts of the ecosystem (not only scholars) and they need to be made discoverable so that they are not just published but also used (and not only in libraries but through as many channels as possible online). It also means that the most logical place to start 'testing' is the APC route, which has worked for journals.

So, who exactly has driven the progress of the OA monograph and the scholarly community's effort to make academic literature both open and affordable? The answers are given from all sides, including scholars (authors), publishers, and librarians offering an abundance of perspectives. But there is also another, less vocal but important group that has been a silent but mighty driver of OA initiatives for the humanities: funders (Eve, 2017). Two major funders include the Andrew W. Mellon Foundation (USA) and the Higher Education Funding Council for England (UK), both known for giving large grants to advance the principles of OA in relation to HSS fields (Eve, 2017).

No matter how we approach OA monograph publishing, it is not an "all or nothing" phenomenon and finding successful business models for OA monograph publications has been a great challenge (Crossick, 2016). Publishing any content OA means there is associated cost with

it that someone must cover, if not the author, then his or her institution or another funding body. Sources of funding for research which underpin monographs vary, and according to an earlier OAPEN study, 45.6 percent of them come from core university funds. Others include research council grants (22.7 percent), grants from other funders (19.6 percent) and 9.3 percent are self-funded (Ferwerda, 2013). In order for OA monographs to have the impact the scholarly community hopes for, their production and distribution must be effective. It all rests on the key players' ability to effectively produce and then distribute academic books (Hellman, 2011).

The central model that first emerged for OA monographs was one of Book Processing Charges (BPCs), known also as Author Processing Charges on the journals side. This, again, was a natural progression of how the scholarly community handled the publication of OA journals in the early years. As early as 2014, some presses (e.g., Amsterdam University Press) supported green OA deposits for monographs into repositories (the same way journals deposits work), with enforced embargo periods of usually lasting from 18 to 24 months (Eve, *OA and the Humanities*, 2014). Soon after this, gold and diamond OA models began to offer alternative solutions to what did not work with green OA. This is where the collaborative (or crowdfunding) model—the focus of this study—enters this picture.

Even though a number of business models have been tested in recent years, it does not appear that one business will dominate others, as is the case with journals. On the monograph side, it appears that several business models will need to co-exist as they offer unique benefits and unique challenges (Crossick, 2016). And even if the scholarly community agrees that gold and diamond OA are more practical than green OA (not to mention, more mindful of the challenges faced by authors), the question of who funds production costs always lingers if it is not resolved (Davies et al., 2014). Similarly, it does not appear that print monographs will cease to be published. Instead, a mixed environment may emerge in which, some have suggested, researchers will use print for full reading, while digital versions will serve for 'searching' and other 'online' functions (Bulger, 2011).

* * *

Researchers have to date dealt less with the impact of OA monographs, particularly those published through library crowdfunding models because it is still relatively new and is

considered an alternative approach (Reinsfelder, 2018). Some of the earliest OA crowdfunding pilots were launched several years ago (Leach-Murray, 2017), involving initiatives like Knowledge Unlatched (launched in Europe) and UnGlue.It (launched in the United States). Further, OA has been embraced by STEM institutions and its impact has thus far been examined in relation to the STEM field, in contrast to the HSS fields, which have more connected with monographs (Eve, *OA and the Humanities*, 2014). The cost of publishing HSS monographs is higher than the cost of publishing STEM articles and journals—significantly higher—as monographs are longer writings that require more editorial and production engagement on the part of publishers (Eve, *OA and the Humanities*, 2017). An additional challenge for OA HSS monographs is that HSS areas are significantly less funded compared to STEM areas (Davies et al., 2014). Therefore, OA models for articles and journals are less complex than those for academic books as they involve less risk for publishers (Mongeau, 2018).

Many prominent OA publishers (e.g., Public Library of Science, BioMedCental) charge fees to publish an article in a journal, and such fees for journals can range from a few hundred dollars to $5,000 for a single article (Beaubien, 2016). While some scholars are skilled at taking advantage of the funding available to them to cover the significant cost of publishing their research in scholarly journals, not all scholars have the same awareness and skills, and not all scholars have access to funding. The same applies to monographs. At Cambridge University Press, the standard charge to publish an OA monograph is 9,500 GBP for a work of up to 120,000 words; at Palgrave Open it is 11,000 GBP; and Brill Open charges based on the type of Creative Commons license attached to the work, which ranges from 8,500 euros for the most restrictive (CC BY-NC-ND) license to 18,500 euros for the least restrictive (CC BY) license (University of Cambridge, *OA monograph costs*, 2021).

Collaboration and crowdfunding

A number of OA business models have emerged over the past few years for OA monograph publishing. Collins et al. (2015) have identified the following types:

- Author payment model (the author pays a fee to the publisher known as An Author Processing Charge, or an APC, or Book Processing Charge, or a BPC)

- Selective open access model (monograph publishing is subsidized by other activities of the press or learned society)
- Collaborative underwriting model (libraries join forces to meet the price of a publisher set for a title to become OA and form a consortium to share the cost)
- Crowdfunding model (publishers pitch a title and seek funding from the 'crowd,' which can include individuals or a group of individuals or institutions)
- Embargo/Delayed OA model (a monograph is released OA after a pre-determined amount of time or after a publisher has had enough time to gain revenue from the sale of the title through other channels before making the work available online for free)
- New university press model (new university presses emerge at an institution with a mission to publish OA and they receive subsidies from their institutions that want to support in-house publishing ventures)
- Freemium model (the basic version of the monograph is available online OA for free and without restriction, while the premium version, which usually includes more content and functionality, is sold in a different format to recover the cost of publishing)

A few years later, in a detailed analysis of OA models, Speicher and other scholars (Speicher, 2018) divided OA models into several groups, some of which overlap with Collins et al.'s division:

- APC model (authors pay publishing fees; this model is used widely by commercial publisher and university presses)
- Freemium model (one, no bells-and-whistles, version of the work is free, while others are not free, such as, e.g., printed version; two good example of this model are OpenEdition and Open Book Publishers)
- Collaboration model (different institutions join forces to open knowledge globally for the benefit of sciences at national level and global level; a good example of this model is the US initiative TOME – Towards an Open Monograph Environment)
- Community model (researchers in specific disciplines join forces with the common goal of making the literature in their field OA worldwide; a good example is the Language Science Press initiative, as well as Meson Press and Mayfly Press)

- Library model (libraries cover the cost of OA publishing; examples of this model include the Open Library of the Humanities, Open Books Publishers, and OAPEN)

Each of these models has advantages and disadvantages and for this reason no single business model has become standard or dominant (Speicher et al., 2018). The APC model, for example, recognizes the costs behind quality publications that someone needs to finance, but this model faces challenges as little funding is available to HSS scholars. The Freemium model works to generate extra revenue for the publisher to recover production costs, but the model has not yet proven to work in the long run. The Collaboration model is successful in bringing together communities that share similar views and goals, but such a model still needs to prove its sustainability long term. The Community model is successful in bringing publishing where it belongs—in the academic community—but lack of funding and resources remain an issue. The Library model's advantage is that it works with existing library workflows, and it distributes funds similar to how funds are distributed for subscriptions. The Library model is also successful in facilitating OA without author fees. Its goal is to take the burden off scholars. It also helps to finance scholarly fields usually not accepted for OA publication (Speicher et al., 2018).

Speicher et al. identified several more business models for OA monographs, which are less represented in literature but worth noting to show the sheer proliferation of approach to publishing and funding OA monographs. These include the Grant model (based on grants given to support new OA ventures); Endowment model (university presses receiving endowments to fund their operations, particularly in the United States); Institutional model (university presses in receive funding from their institutions to cover their costs); Revenue: Services model (publishers offering services to other publishers, while at the same time publishing their own OA titles), and Revenue model: Sales of Print (publishers selling print copies or other formats while simultaneously offering free versions of the work online (Speicher et al., 2018).

What one immediately notices when comparing these two breakdowns of existing business models for OA monographs (that of Collins et al. and that of Speicher et al.) developed three years apart, is that there is no one-size-fits-all approach to how OA monographs are funded, that different terminologies exist to define models that overlap in many ways, and that some new models are still emerging. Some models have transformed and taken the traits of other

models, which at some point had more distinct characteristics but began to merge with others over time, becoming less distinct. The Collaborative model is a good example. It has also been referred to as the "crowdfunding" model, the "collaborative underwriting" model as well as the "library" model, since it has placed libraries at the center of the collective funding activity which serves to cover the cost of publishing monographs on behalf of authors and for the benefit of publishers and end users. The sheer fact that there is no consensus yet on how to differentiate between existing—and often overlapping—business models further proves that the landscape of OA monograph publishing is still in the state of flux and these models still 'new' and 'alternative' when compared to traditional publishing models.

The scholarly community has reiterated many times over the years the importance of collaboration and effective communication in the entire publishing ecosystem (Deegan, 2017), and OA monograph publishing and the development of effective business models for OA monograph publishing is no exception. Applying 'collective action' to OA monograph publishing makes sense as much as it makes sense when libraries join forces to support non-OA-related endeavors. Collaboration is about joining forces and about sharing. For this reason, throughout this study, this model is described using interchangeable terms, including collaborative funding, crowdfunding, library crowdfunding, collective source-funding, collective funding, and collective underwriting—all of which mean the same thing: libraries come together to fund the publishing of OA monographs for the benefit of the global research community.

As noted in the 2013 workshop report on OA and scholarly books—organized by Knowledge Unlatched (KU) and the Berkman Center for Internet and Society at Harvard Law School and which brought together 21 publishers, librarians, academic and OA innovators to discuss the challenges facing OA monograph publishing—"a change in behavior from large numbers of actors in order to secure a benefit for an entire community. Although these changes may produce significant benefits across the system as a whole, there may be no immediate benefit to any one actor in the system" (Montgomery, 2013), but the global scientific community will benefit as a whole, particularly the countries of the world where access to information and scholarly research is not near the levels in the most prosperous countries. Likewise, it is safe to assume—as the landscape of OA publishing expands and grows more complex— that no single model will fit everyone and that there is simply no scenario for a perfect transition to OA. One logical reason why

it is unlikely that any overarching business model for OA monographs will prevail as the ultimate solution is the fact that research needs, funding policies, and publishing operations are not universal but country-specific and vary greatly even among the countries that share many similarities in their perspectives of OA (Ferwerda et al., 2017).

Crowdfunding in libraries via consortia ('coming together') is one of the alternative funding models for OA scholarly books that has attracted a great deal of attention the last few years. In this model, university, research, and/or national libraries around the world join forces to 'open' a specific number of scholarly books every year. The money that is collected from them every year is then distributed to publishers and/or authors so that they avoid APCs and/or BPCs. In traditional publishing, the cost associated with publishing works OA is often the responsibility of authors, who pay publishers to get their titles published OA using CC licenses. Thus, the authors' institutions look for ways to free up funds to cover the cost of author feels and thus take the burden off their scholars (Reinsfelder, 2018; Beaubien, 2016).

The main advantage of the crowdfunding model is that the collected funds from participating libraries are used to cover author fees. The other advantage is that unlike institutional models—which are heavily focused on national repositories—this model is usually very global in nature and invites any institution of higher learning, anywhere in the world, to participate, thus securing the resources needed to continually make science widely accessible (Ferwerda, 2014). When enough funds are collected via crowdfunding, selected monographs are published OA with various CC licenses assigned to them (in coordination with participating publishers and authors) and they become available not only to the institutions that directly fund them but to any user online, regardless of whether their institutions participated in crowdfunding (Pinter, 2012). Once they are published OA, those e-books are then archived in various digital platforms and in online repositories, which are globally accessible without restriction, including, for example, JSTOR, OAPEN, and the Open Research Library, to name a few.

There has been a number of OA initiatives that rely on crowdfunding to finance the publishing of OA monographs, both front list titles (those born OA, which means they've never been published before and are brand new titles) and backlist titles (older books which already exist in print and are being permanently converted to OA). The most well-known and the most

prevalent collaborative/crowdfunding initiatives include Reveal Digital, Unglue.it, and Knowledge Unlatched (Bulock, 2018).

Reveal Digital (RD) applies the concept of crowdfunding to digital collections. As explain on its website, RD "provides a library crowd-publishing model where libraries pool funds from their acquisitions budgets to develop open access curated primary source collections." There are two ways libraries can participate: via a one-time contribution model (to support a single collection) or the strategic development model (a five-year commitment to contribute annually or as a lump sum).

Unglue.it is a program of the Free Ebook Foundation. As stated on the foundation's website, Unglue.it pioneered the model of crowdfunding "to bring copyrighted books into the public commons." The program catalogs, distributes and helps to fund free-licensed and public domain e-books. Launched in 2012, Unglue.it is rooted in the idea that "the gifts from many readers can free e-books from the DRM (Digital Rights Management) chains that bind them" and functions like a "participatory democracy" (Sigal, 2017). Once a funding goal (set in advance by the publisher) for each title is set, the organization collects pledges from individuals or institutions; if the campaign meets the goal, then the pledgers are charged and the funds go to the rights holder, who can publish an OA title (academic and/or popular) under a CC license. The model started out by focusing on backlist titles only but has since expanded to include front list monographs (Ferwerda, 2014).

Unlike Unglue.it, Knowledge Unlatched, which piloted in 2013, is more focused on using library funding to provide open access to books from established scholarly publishers. KU offers their titles for pledging in large batches to institutions worldwide (Bulock, 2018). In essence, the libraries that participate each year form a *global consortium of academic institutions* that fund the publication of monographs, which are made OA worldwide anywhere, regardless of who participates in crowdfunding. As described in the 2013 Berkman Workshop Report, KU aims to facilitate a single, shared payment from libraries worldwide to scholarly publishers in return for front-list as well as backlist titles being made available OA (Montgomery, 2013).

Hugh Look and Frances Pinter first proposed a model for "collectively underwriting the risks and costs based on aggregating demand in the form of a consortium and paying publishers for getting to first copy stage" in 2010 (Eve, *OA and the Humanities*, 2014), suggesting the following:

> "If, say 1,000 libraries paid into a fund that 'bought' the non-commercial open access rights to a book that carried, for the sake of the arithmetic, a 'getting to first copy' cost of $10,000, then each library would contribute $10. The average monograph today costs approximately $80. This would not only get libraries eight times as many titles online, it would be truly contributing to making knowledge accessible globally." (Look & Pinter, 2010)

This proposal was realized in 2013 under the leadership of Pinter and the launch of the Knowledge Unlatched (KU) initiative, which is arguably the most widespread and well-known global crowdfunding initiative for OA of its kind, spanning countries and institutions worldwide. The KU pilot at the time consisted of 28 titles from 13 respected publishers (Cambridge University Press, Duke University Press, de Gruyter, Bloomsbury Academic, Brill, Amsterdam University Press, etc.) and nearly 300 libraries participated, including those in North America, the United Kingdom, Australia, among other countries and regions (Eve, *OA and the Humanities*, 2014).

Pinter described the workings of the KU model in her early presentations and papers proposing the original pilot as follows (Pinter, 2012):

1. Participating publishers (including university and commercial presses) offer titles (including monographs and specialized academic books of high quality) for sale reflecting original costs only (i.e., the publishers' price is to reflect its fully loaded first copy costs, plus an operating margin).
2. Individual libraries (including university, research, and teaching libraries) select titles either as individual titles or as collections.
3. Their selections are sent to KU, who coordinates library participation, specifying the chosen titles to be purchased at the stated prices.
4. A Title Fee is paid to publisher to cover the costs of publishing each monograph OA. The Title Fee paid to publishers is always fixed.
5. After they receive the funds, participating publishers make the selected titles available OA in PDF, HTML, or other digital formats.
6. Publishers make print copies and e-book versions (which included content not found in the OA version) of selected titles available to member libraries at a discount off the recommended retail price.

The idea of forming a consortium is familiar to libraries. Libraries in various countries around the world have worked together in consortia to secure benefits for the communities they serve and to ensure all libraries can serve their communities equally (Pinter, 2012). By inviting them to form a global consortium that pays a single fee, and by allowing publishers to continue selling physical copies of those OA monographs as well as value-added e-book versions, all stakeholders in the monograph market benefit, including publishers, libraries, scholars and users (Pinter, 2012). The goal of the KU pilot was to test three expectations: that publishers would want to publish high quality, brand new OA monographs using a CC license if they are promised an upfront payment from libraries; that libraries in different countries would join forces and willingly create a global consortium which pays publishers to make quality monographs OA; and that if both sides cooperated, KU's innovative approach would become a practical new solution to publishing and financing scholarly monographs (Montgomery, 2014).

Since the successful pilot, which was launched in 2013 and ended in early 2014, KU has been 'unlatching' new collections of OA monographs on a yearly basis and has to date unlatched more than 2000 monographs (KU website, 2021). Direct funding for KU's proof-of-concept pilot was provided by a number of institutions and organizations, including, among others, the Open Society Foundation; The British Library Trust, The University of Melbourne, and the University of Western Australia. Non-monetary support was also provided by New York Public Library, Duke University Library, and Harvard University Library, among others (Montgomery, 2014).

Although the organization has since the pilot branched out to offer librarians a wide range of subject-specific or publisher-specific collections to crowdfund that are not always focused on monographs and also include journals and other OA content (e.g., videos, posters), KU remains the most recognized among libraries for its legacy multi-disciplinary collection of monographs called KU Select. Over 600 institutions worldwide—particularly libraries in the United States, western and northern Europe, and Australia—have participated in KU's crowdfunding efforts since the 2013 pilot (KU website, 2021).

Goals of the study

Crowdfunding is a method of funding a project by pulling small investments from a large number of contributors (Bulock, 2018) or, in the case of OA scholarly publishing, from a large number of libraries. In library crowdfunding initiatives (or projects), institutions are invited to collaborate and commit funds for the benefit of the wider, global rather than local community. Many studies have previously examined the effectiveness of various OA approaches to monograph publishing. Some studies have specifically focused on OA monograph publishing (as explained in Chapter 2, which provides a thorough literature review on the topic). But the questions that still linger in 2021 are, among others:

- How effective are library crowdfunding initiatives for OA monographs?
- What factors may contribute to the sustainability of such initiatives?
- What are the main reasons libraries participate or do not participate in such initiatives?
- Do institutions participate because of the basic mission of the OA movement (which is to produce global benefits), or is their local community still their priority?
- What type of institutions support OA funding through this type of collaboration?
- What are the traits and characteristics of the most supportive institutions?

In this research, terms “crowdfunding,” “collaborative,” and “cooperative” are used interchangeably and are discussed exclusively in relation to OA business models and involving libraries as the main funders. In other words, this study examines the ‘crowdfunding’ models when their participants are libraries (not individuals, or publishers, or authors) and when they serve to enable the publishing of OA monographs, i.e., OA academic books in digital format. This means that OA initiatives such as KU essentially embody at least three distinct models in one: Library, Collaboration, and Crowdfunding model because they invite ‘libraries’ to ‘collaborate’ by participating in ‘crowdfunding,’ which facilitates the publishing of OA monographs for the good of global science. More background information on the uniqueness of the KU business model and its approach to crowdfunding is given in Chapter 5, which provides an in-depth quantitative analysis of the factors that may contribute to the sustainability of the crowdfunding OA model applied by KU.

The study investigates the sustainability of this business model to determine the key factors that may contribute to its long-term sustainability that have not previously been studied or have not been studied adequately. In other words, this study investigates the factors that determine the crowdfunding's model's degree of efficiency and value for the scholarly community. One of the main goals is to establish the relationship between the usage of OA books in a wide range of European institutions and the decisions of those institutions to participate in global crowdfunding campaigns of this kind. The study investigates the complexity of this alternative model of crowdfunding OA academic e-books from the aspect of usage and analytics available from the hosting platform JSTOR, which is available to users and researchers around the world. The objective is to establish if the institutions allocating the most funds for crowdfunding have the most benefit in terms of usage and if insight into monograph usage effects the decisions of these institutions to continuously support such models. The intention is also to identify differences in the use of OA monographs supported through crowdfunding projects between participating institutions and those not participating.

The study also takes a closer look at the institutions that regularly participate in crowdfunding to determine what their characteristics are and what those institutions may have in common. For this insight, the study relies on examining the data from three world ranking sources: THE World Rankings (by Times Higher Education), Academic Ranking of World Universities (by ShanghaiRanking Consultancy) and QS World University Rankings (by QS Quacquarelli Symonds). The study critically examines various scores given to the institutions by these three sources, including the overall world ranking score, research output score, citation score, and the international outlook score. The study also profiles the institutions based on their student and faculty size as well as the institutions inclinations to support OA initiatives that are closely related to the scholarly disciplines they are most invested in academically.

Finally, the aim is to identify other factors influencing libraries' decisions to participate in crowdfunding monographs. The 'other' factors are explored in more depth in Chapter 5, which provides insight into the findings drawn from a survey of 160 librarians engaged with OA in a wide range of European institutions. This survey (Chapter 5; 5.3) serves to supplement the findings based on the quantitative research (Chapter 5; 5.1 and 5.2). It investigates 'additional' factors that contribute to the decisions of institutions to participate in crowdfunding OA

campaigns (e.g., the very principle of OA and open science; the influence of colleagues; the pressure from scholars/researchers; specific disciplines) or not to participate (e.g., cost of monographs, budget restraints, and other priorities, such as investing in local repositories, focusing on journals rather than books, etc.).

While the study touches on some previous studies that focused on OA journals with the goal of better grasping the complexity of perceptions regarding OA, the study's focus are not OA journals and/or their impact or the business models associated with OA journals. The study's sole focus are OA monographs (i.e., academic books), specifically those published Open Access through 'crowdfunding' initiatives involving libraries. Its main theoretical contribution is achieved by critically considering the alternative 'crowdfunding' model for publishing OA monographs from the basis of the innovation diffusion theory (described in Chapter 3), which seeks to explain how, why, and at what rate new ideas and innovation spreads, and the crowdfunding approach to financing OA monographs is considered an innovative business model in the OA space. The sustainability of this model is therefore approached from the aspect of user data analytics as well as from the aspect of institution ranking and profiling, with the goal of clarifying dilemmas about OA monographs and institutions that financially support or do not support the library crowdfunding model designed to finance them. In summary, the study examines the possibility that the sustainability of the crowdfunding model depends on the use and impact of scholarly monographs at the local (rather than global) level and the support of the most affluent, research-intensive institutions.

Key findings

Libraries and the institutions they serve need a deeper insight into the impact of the use or non-use of scholarly monographs in their institutions so that they may better understand the benefits they have from supporting global crowdfunding campaigns, since the sustainability of this type of business model is only achieved if the institutions worldwide support it in significant numbers by allocating funds for it on a regular basis. If libraries do not participate in crowdfunding, the initiatives of this type cannot survive long-term, regardless of the quality of the content they may provide or the determination of publishers and scholars to participate.

This research provides librarians, academic institutions, and scholarly publishers with a clear insight into the use of OA monographs in institutions that participate (or do not participate) in crowdfunding models and the motives for supporting such models, thus contributing to discussions of the sustainability of library crowdfunding in this context. The study answers some of the crucial questions asked regarding OA monograph publishing via crowdfunding: Who supports OA monograph crowdfunding models the most and why? and What steps may be taken to ensure the sustainability of such a model and the continued publishing of OA monographs?

The study's key findings are discussed in the final chapter, which provides a concluding summary of the results of the research as well as recommendations for further research. Based on the research methods applied, the following conclusions were reached regarding the key factors contributing to the sustainability of the crowdfunding model for OA monographs:

- Usage of OA monographs is the strongest in the institutions that participate in crowdfunding vs. the institutions that do not participate, but among the institutions that finance KU's publishing of OA monographs loyally and participate in crowdfunding every year (in this case, nine institutions in several countries), usage data vary—from those that show above-average usage numbers to those that show below-average usage numbers.
- The most reliable factors that help us to understand the 'types' of institutions that support crowdfunding include the institution's world ranking, research output score, citations impact, and international score. The institutions that support crowdfunding, therefore, may be described as follows: they are highly ranked overall, they stand out for their scholarly contributions, particularly in relation to research output, citations impact, and international outlook. Student size and faculty size (i.e., the number of students attending an institutions the number of instructors) may be used as additional factors in establishing an institution's likelihood of supporting crowdfunding. However, they are not the key predictor.
- Scholarly community-driven OA initiatives focused on specific disciplines tend to get the most support from the institutions that have strong reputations in that scholarly discipline or field.

Based on survey results (Chapter 5; 5.3), these conclusions are reached:

- Librarians still want to support OA monographs in principle and because of the belief in the basic tenets of the OA movement.
- Library budgets and/or the cost of OA monographs remain the main reasons libraries do not allocate more funds for crowdfunding initiatives.
- Librarians do not see usage of OA monographs at their institutions as the deciding factor contributing to their decision whether to support crowdfunding initiatives.
- The relevance of the disciplines institutions are invested in and the awareness that the works of their scholars are being crowdfunded are stronger motivators for libraries to participate than usage.

CHAPTER 2

LITERATURE REVIEW

Open access to academic content has been a popular topic in academic publishing for the last two decades, especially in the last ten years. Libraries—particularly those in research-intensive, well-funded universities—continue to experiment with business models that contribute to the publishing of monographs OA. Their interest in OA monographs shows their focus has shifted from thinking of OA only through the lens of OA journal publishing to thinking of OA through the lens of various other formats, including monographs. When the OA movement first began, the scholars were at its forefront—not librarians—as the movement's goals are strongly reflected the scholars' concerns and perceptions (Bailey, 2007). While there were librarians among the early prominent OA advocates, the success of the OA movement did not rest on their support and did not cause any "schisms" in the early stages of the movement's progress (Bailey, 2007). Further, the movement itself did not require librarians to do anything for it to exist since libraries were not its foundation. Instead, it was the scholarly community (Bailey, 2007). However, with the advent of various business models for both journals and monographs, libraries' roles began to expand, and university and national libraries today play a vital role in all OA conversations.

To better grasp the roles of libraries in the narrative of OA book publishing and the extent to which these roles have evolved over time, we ought to take a closer look at how their perspectives changed and matured over time. This strategy helps to pinpoint the scholarly community's key concerns and the issues that may be stopping it from fully embracing OA publishing. But before we can fully grasp librarian perspectives, we ought to also examine the view of scholars (i.e., authors of monographs) and publishers (i.e., distributors of monographs), because it is precisely their views and concerns that have not only shaped the OA publishing landscape, but they have also had a profound influence on librarians and their willingness to accept and support OA monograph publishing and invest in it financially.

But it would be difficult and possibly even counterproductive to evaluate scholar, publisher or librarian perspectives by 'isolating' monograph publishing from the wider OA

landscape, which includes journals. In fact, some of the early quantitative studies, including two OAPEN studies in the Netherlands and the United Kingdom (Ferwerda et al., 2013; Collins & Milloy, 2015), even if their sole focus was on monographs, cautioned that their survey and interview participants often spoke of OA in general, and not necessary in the context of monographs. They could not help but be influenced by the lessons they learned from OA journals, which have had significantly more times to mature and grow.

Scholar perspectives

Scholars are the producers of original research and, consequently, the scholarly content which presents the findings of that research, and which is ultimately published. The process of publishing any scholarly content starts and ends with the scholar and the scholarly community. The scholar is the first to interact with the content (as author and creator) and the last (as researcher and end user). This study uses the term 'scholar' synonymously with the term 'author,' as the scholar is the author of scholarly literature. In other words, while we may argue that not all authors are scholars, all scholars are authors in some aspect. Publishing is an integral part of a scholar's identity. As has been previously argued in the context of journals, it is important that scholars embrace the responsibility of being part of the process that re-envisions how to publish scholarly research and that they influence its future (Edwards, 2014).

Ferwerda accurately summarized scholars' relationship to the monograph at his presentation at the 8th Munin Conference on Scholarly Publishing, Tromsø, Norway, when he highlighted how and why scholars were protective of the traditional monograph, which largely explains why their acceptance of the OA monograph has been a cautionary tale. Writing a monograph, unlike writing a journal article, is not about presenting a result or an important research finding; it's about building a narrative around a specific topic, and building that narrative is an integral part of this process. Which means that the scholar cannot quite detach himself or herself from the monograph the way he can from an article and this relationship is not only personal, but it can take years to develop. These reasons have led to the scholars' 'protective' attitudes, their preference for print, their persistent distrust in anything that is *free* or *online*, and their discomfort with Creative Commons licenses—particularly the most liberal one (CC BY license)—which they see as a threat to their work's integrity (Ferwerda, 2013).

There is also the political aspect of the scholarly book that has influenced the scholar's perception of the OA monograph. Scholars are increasingly asked to work faster, to produce more, and to be responsive to new publishing agendas because they are expected to undertake research that can produce immediate impact outside academia. The monograph as a form offers some opposition to these demands because of its long gestation, its resistance to quick reading or easy summary and its aspiration for long-term significance (Mole, 2016). It is not, surprising, then, that the introduction of alternative business models for OA monograph has not exactly been *revolutionary* as there is no single business model that may be perceived more viable over others (Pinter, 2016).

A survey of a small pool of researchers at York University in the UK—whose author fees had been subsidized by institutions—found that if authors are provided funding to publish OA, they are more incentivized to publish OA (Nariani & Farnandez, 2012). A 2016 study conducted at University of California Berkeley—which evaluated the impact of an OA initiative at the university (called Berkeley Research Impact Initiative) which focused on STEM disciplines in the context of OA journals—found in its survey with the faculty that had received the university funding to publish OA, the overwhelming majority had positive perceptions of the impact of OA, with 82 percent stating that their articles had a greater impact because they were published OA and that the OA initiatives gave them a motivation and an opportunity to 'try' OA (Teplitzky, 2016).

Tenopir et al.'s 2017 study also examined the attitudes and perspectives of scholars toward OA by focusing on four large, research-intensive North American universities. As the authors state, "although the loudest voices may often be heard, in reality there is a wide range of attitudes and behaviors toward publishing." It is vital for academic librarians to understand those voices (Tenopir et al., 2017). The study came to six major conclusions. Although they concerned the OA publishing of journals, several of these could also be applied to OA monographs, particularly the following:

- The prevailing attitude toward OA is often ambivalence (the majority of scholars do not have strong opinions for or against OA).

- Faculty are often conservative in their acceptance of OA because they question quality and prestige and how the publishing of their research via alternative channels might impact their reputation and careers.
- STEM scholars are more accepting of OA because STEM literature is more closely tied to journal publishing, rather than monograph publishing, and OA journal models have had time to become more widely accepted.

When it comes to the OA monograph in particular, one scholar perspective permeates most discussions: Writing a monograph is a major undertaking, far more arduous than writing a journal article. This is why scholars have always expected to be compensated for the significant amount of time and resources devoted to producing monographs (Eve, *OA and the Humanities*, 2014). For this reason, traditional publishers still invest a great deal in print monographs by relying on traditional methods. In 2017, major publishers, including Oxford and Cambridge University Press, reported only four years ago that very few authors in the humanities requested to have their works published OA (Deegan, 2017). According to a 2014 JISC survey of 2231 academics, 83 percent of humanities scholars said they used digital versions of scholarly books, but 87 percent said they used a print copy for the last text they read, confirming that it was highly unlikely the audience for print monographs will disappear (Cond, 2016) and that OA monographs will be an *addition to* rather than *substitution of* existing practice (Cond, 2016).

Despite the omnipresence and impact of scholarly journals, scholars care about books and consider it important to publish and have access to their peer's monographs. OAPEN-UK 2014 researcher study revealed that 72 percent of social sciences researchers found monograph publishing important/very important and 95 percent of humanities researchers find monograph publishing important/very important. In terms of access, the numbers were even higher: 89 percent of social science researchers found access to monograph to be important/very important and 98 percent of humanities researchers. Interestingly, the same survey revealed that 50 percent of researchers found it both important and difficult to publish monographs, while only ten percent said it was difficult to access them (Collins & Milloy, 2016). This study revealed that scholars seemed to be more concerned about the publishing process vs. who had access to their work and how their work would be accessed. This also confirmed their ambivalence about who

had access, but it very much showed they cared about the format of monograph and its place in scholarship.

An earlier OAPEN-UK study (2012) investigated why scholars wanted to publish monographs with certain publishers. Their top answers included: reaching the right audience through their ability to disseminate/distribute (54 percent), trust in their quality assurance process (43 percent), and their reputation as being the best in a specific academic field (35 percent). These findings revealed, unsurprisingly, that scholars cared about quality and reaching the right audience through appropriate and effective marking/promotion vehicles. Most scholars do not want to be responsible for promoting and marketing their work, since traditional publishers have systems in place the scholarly community has effectively relied on for decades. In fact, the same 2012 survey also revealed that 81 percent of scholars said distribution and sales, along with marketing and promotion, were important/very important to them when publishing monographs (Collins & Milloy, 2016).

Among scholars' main concerns when it came to OA monograph publishing, Adema identifies the following: quality and reputation; the presence of Book Processing Charges (BPCs); licenses; and marketing and exposure (Adema, 2019). The question of quality and reputation especially comes up in the context of OA presses that are not as established as university presses. A 2015 Springer Nature survey found that 41 percent of scholars had concerns about the quality of OA. This survey included over 21,000 authors of peer-reviewed articles from a range of HSS and STEM disciplines. Over 96 percent of the respondents from the HSS field said that the reputation of the journal in which their work was published was "very important" or "quite important," and 97 percent from the STEM field, revealing 'prestige' or the reputation of the journal as the most important factor determining their decision how they publish their work (Nature Publishing Group, 2015). Although this survey focused on journals, similar parallels can be drawn in the context of OA books, particularly in the HSS field, where the prestige of publishing an HSS monograph with a reputable publisher is a way to gain tenure (as already confirmed in the OAPEN-UK study mentioned above).

There has long been pressure in the scholarly community to publish articles in prestige journals or scholarly books published by esteemed presses (Greco, 2015). Such high-value publishers have always been sought after, which over time resulted in a high level of supply, and

this eventually led to price increases of both journal subscriptions and monographs. Some have also suggested that the overemphasis on prestige resulted in (or at the very least, contributed to) libraries beginning to struggle purchasing content to meet their institutions' needs (Eve, *OA and the Humanities*, 2014).

While quality and prestige often go hand in hand, and while some may still argue that the best quality research is available from the highest prestige, 'traditional' sources, there are instances when the two do not overlap but, in fact, come into conflict. Eve identified three examples that show why OA publishing needs to be given the benefit of the doubt: 1) Some literature is new and takes time to cultivate a prestigious status of a journal or a press; 2) Prestige is a zero-sum game while quality is not (some quality research may never and is often never published by prestigious presses) and 3) Prestige can be based on outdated judgments of quality, as times change and bring about new ideas of what constitutes 'quality' (Eve, *OA and the Humanities*, 2014).

While at the top of the scholars' list of priorities in and outside the context of OA monograph publishing, quality and prestige are not the only concerns on scholars' minds. Others include:

- Author fees and the cost associated with the publishing of OA monographs (authors cannot afford the steep cost of publishing any more than libraries can afford to fund them). They also often feel that it is inappropriate to give the funds received from public money to commercial, for-profit publishers (since many that publish content OA are for-profit).
- The issue of derivatives and open licenses for OA books (authors are concerned that their works may be misinterpreted, or that their statements and findings would be misused or taken out of context because of the nature of CC licenses, which allow readers to 'derive' from original works unless they are protected with the CC BY-ND license (which is mostly discouraged by OA advocates).
- The issues surrounding trade books and theses (some scholars have made careers publishing books for the general market and get extra income from trade books read by the general public) and they fear that the move to OA may lead to less print sales (and to less royalties received from them).

- Issues around marketing and exposure (If a monograph is published OA, does it mean that it will receive the same exposure and that the same resources will go into promoting it to ensure it reaches the right audience? As revealed by the OAPEN-UK study, scholars want to see their work properly and effectively promoted.)

The 2013 OAPEN-NL report surveyed authors and publishers regarding three key topics: 1) their familiarity with OA publishing; 2) their publication in and use of electronic as well as OA publications and 3) their motivations for publishing OA (Ferwerda, 2013). The survey asked publishers and authors which publishing values are the most important to them. They could choose from values such as trust, quality, efficiency, reputation, and reward. If the replies from the authors are combined with those from the publishers, we see that both accessibility and quality are seen as important or very important; reputation and reward tend toward a neutral classification. If we look at the answers of the publishers separately, however, we see that trust and quality are seen as the most important, and accessibility moves to the third place. For authors, however, accessibility remains on top. This matches the OAPEN-UK research where availability and quality also came out on top, as they did in DOAB and earlier OAPEN findings (Adema & Rutten, 2010; Adema, 2012).

On average, scholars had more positive views in comparison to publishers with respect to the influence of OA on the values that are fundamental to scholarly communication, especially with respect to reputation and reward. Also, scholars expected OA monographs to generate more citations early on, but this did not happen. Even though OA journals have been confirmed to generate more citations for scholars, the same could not be confirmed for OA monographs as quickly (Ferwerda, 2013). But when OA monographs had more time to develop and become more accessible, later reports found that there was, in fact, a rise in citations for OA books when compared to non-OA books. Among other findings, the 2017 Springer Nature report found that OA books received on average 50 percent more downloads than non-OA books (Emery, 2017).

Further, while contracts and DRM are not a priority for researchers, they very much care about protecting the integrity of their work. The issue of CC licensing remains a major issue for OA monograph publishing. The OAPEN 2012 survey revealed that a whopping 79 percent of scholars preferred the most restrictive CC license— CC BY NC ND—for their OA monograph. Which means they chose the license that would not allow users to produce derivatives in any

way. This again shows that scholars would go to great lengths to protect their work and the integrity of their scholarship. At the heart of this stand is the fear that their work might be altered inappropriately, taken out of context, or misused by their peers or other researchers.

Both 2012 and 2014 OAPEN-UK surveys showed that the scholarly community strongly supported OA efforts in their institutions and internationally. Many scholars still support OA as a point of principle. The 2014 survey revealed that 48 percent (almost half) supported OA monograph publishing as a point of principle, in contrast to 62 percent which supported journal OA publishing as a point of principle (Collins & Milloy, 2016). In the interviews given to the Digital Science Report on the state of OA monographs, several US scholars cited two main reasons they chose to publish their monographic work OA: discoverability and accessibility. First, scholars said they wanted to reach new and diverse audiences and the largest possible readership (which can only be achieved if their books were open and openly available) and second, they did not want the required reading to pose a burden on the students. In other words, if the book is free, it is more accessible (Grimme et al., 2019). The author interviews part of the "OA Effect" 2017 Springer Nature report also revealed that reaching new audiences around the world was a major motivation for publishing OA monographs (Emery et al., 2019). This is the case among scholars who work on books which feature contributions from authors from developing countries, and who have more awareness of the "inequality gap" (Lucraft, 2018).

Evidently, almost half of scholars in the arts, humanities and social sciences in the UK have positive attitudes toward OA (Jubb, 2017). The Academic Book of the Future Project, a two-year project funded by the Arts and Humanities Research Council and the British Library, said it did not find evidence of a "near-universal consensus" that OA is, in fact, 'good' for the humanities (Eve, 2017). While it is true that scholars and authors in general write to be read and discovered and that free access to scholarly literature provides numerous benefits for the global community, there remain problems that will not be easy to overcome (Deegan, 2017). One such problem for authors is the concern over the Green/Gold OA dichotomy. In short, Green OA (depositing monographs into repositories) will not suffice since discoverability will remain an issue, as will embargo periods, and implementing Gold OA will likely take years until it becomes an integral part of the publishing community (Deegan, 2017).

The inadequacy of gold OA is, of course, tied to author fees (BPCs or APCs)**.** Scholars have to remain vigilant about who is charging them, why, and how. Many closed-access journals charge author fees, while many peer-reviewed OA journals do not, so it's not always wise to assume that *closed-access* equals no author fees. Likewise, OA does not have to mean 'author pays.' The existence of author fees should, therefore, not invalidate the quality of an OA publication (Barnes, 2018) regardless of what type of format is published.

To what extent scholars support OA and OA formats also depends on the disciplines. In fact, researchers care about their disciplines more than they care about their institutions. They are more loyal to their field than to their university as a whole (Collins & Milloy, 2016), which means librarians need to support them in ways that support their specific disciplines. The already-mentioned 2015 Springer Nature survey of scholarly authors, which revealed how much they cared about reputation of the publishing source, also revealed how much they cared about the relevance of the discipline. 97 percent of respondents belonging to HSS fields chose their disciplines as the essential component of their careers, with reputation and quality ranking second and third, respectively (Nature Publishing Group, 2015). For STEM fields, the relevance of reputation remained in the first place (97 percent), but the relevance of the discipline ranked second (95 percent). The relevance of scholarly disciplines is related to the scholars' desire to build strong networks in their communities. When asked who their ideal audience for their published work was, about 90 percent of all respondents chose 'researchers in my field' as one of their 'top three' answers.

Despite their idealistic tendencies in some regard, scholars have realistic expectations of the performance of their book. While they understand the sales of monographs are not comparable to those of trade books and will likely never be, they are aware that if a title becomes a core (required) reading on campuses, it can indeed cross over into the trade market and earn them considerable profit (Collins & Milloy, 2016). This is why scholars remain emotionally attached to the print monograph, even if its digital version is published OA.

Lastly, there are some issues regarding OA monograph publishing that scholars perceive as the 'international challenge,' and they concern the use (or non-use) of the English language. It has been argued that if English remains the lingua franca for scholarly publications, a lot of scholarly literature will remain undiscovered (Edwards, 2014), since much of quality scholarly

literature is not available in English and translation tools are still not adequate enough to surmount this obstacle. The 'translation weakness' is an issue for OA monographs (Suber, 2012), since most of the world's population still does not study or publish in English and the OA movement is yet to warm up to more publishing of scholarly literature in languages other than English (and other than the main languages).

In summary, there is an array of scholar perspectives when it comes to OA monograph publishing. While their willingness to support OA publishing in principle exists, so does their insistence on preserving the integrity of the monograph. Among the concerns that top the list include are the issues of quality, reputation, marketing and distribution, licensing, and long-term sustainability of Gold OA in the fact of author fees. How can authors overcome these concerns? One way to address such concerns, as proposed by Adema, is to simply remain engaged. As mentioned at the beginning of this chapter, scholars were the ones at the forefront of the OA movement, and they should remain its vocal advocates. While their fears are valid, so is the potential of the OA monograph to transform the scholarly community for the better. The way to overcome inner conflicts is to continue participating in the dialog and being open to OA monograph possibilities (Adema, 2019).

Publisher perspectives

When one thinks of publishers as part of the ongoing OA debate, one first thinks of large, commercial, for-profit publishers (e.g., Elsevier, Wiley, De Gruyter, Emerald, Springer Nature) that have been around for decades and that have sold books and services to libraries before and after the digital revolution. But the landscape of OA publishing is, in fact, much more diverse and multi-faceted, including an array of publishers: for-profit, commercial publishers, non-profit publishers, independent yet established publishers, institutional presses, professional and scholar-led presses, university presses, library presses and a wide variety of emerging start-ups increasingly taking on the roles of publishers. While the missions of these publishers may overlap, they take very different approaches to OA publishing. When it comes to OA monographs and their licensing, publishers are a bit more lenient than scholars, preferring CC BY-NC licenses for OA monographs so that they may recover costs of printed edition (Ferwerda, 2013). The OA purists sometimes argue that anything that is not a CC BY license (the least

restrictive of the Creative Commons licenses) isn't real 'open access,' but publishers often warn that they have to be more open minded than that (Hole, 2015) because the road from the print monograph to the OA monograph is not without challenges, some of which may take years to overcome.

University presses have perhaps faced the most challenges in the face of emerging OA publishing models. Before the digital revolution, university presses played an important role in the dissemination of scholarly knowledge. Their scholarly books have become the "gold standard" in many academic fields, particularly HSS fields (Greco & Wharton, 2018). In many ways, their very identity is tied to the existence of the scholarly monograph. Like other publishers, university presses range in size from very large, with exceptionally high annual revenues (e.g., Oxford University Press; Cambridge University Press) to large (e.g., University of Chicago Press), medium-sized (e.g., University of Notre Dame) and small (e.g., Carnegie Mellon University).

The majority of publishers' revenue, regardless of their size, comes from the sale of printed books through general retailers or wholesalers (e.g., Amazon, Ingram) or specialist library vendors like EBSCO and ProQuest (Grimme et al., 2019). If there is no monetary value attached to an OA book, what incentive would those retailers and distributors have to distribute content that is OA (Grimme et al., 2019)? And like other publishers, university presses strive to balance adopting OA strategies and earning revenues from their legacy business model which still helps them thrive as businesses and cover operation costs. For university presses, the movement toward OA is often seen as a necessity as it is the only way for university presses to compete with more established publishers, who are better positioned to move rapidly, remain viable, and embrace disruptive changes (Greco & Wharton, 2018).

Just like libraries begin and end their discussions by focusing most of all on funding issues and budget restraints, publishers' perspectives are also closely tied to the issues of cost, investment, and recovering the cost of their investments. In order to understand publishers' concerns and reservations, we must have an understanding of what the real costs of publishing scholarly monographs are. A study by Ithaka S+R consulting and research service—which gathered data on 382 monographs from 20 participating presses of varying sizes and annual revenues, all members of the Association of American University Presses—revealed that

publishing a monograph today was considerably more expensive than reported anecdotally. The study yielded a wide range of costs per title—as low as 15,140 USD and as high as 129,909 USD (Maron, 2016). The study's key findings confirmed that regardless of the type of university presses, the largest cost item across the board is the investment in human resources, i.e., staff time related to acquisitions, editorial processes, and other activities that ensure quality and seamless production (Maron, 2016) which can only be achieved if the most competent and knowledgeable employees (which require higher salaries) are entrusted with the responsibilities of acquiring top content, editing it, copyediting, proofreading, promoting, etc. Not all studies, however, showed such high numbers. The OAPEN-NL study showed the average 'first copy' cost of producing OA monographs in the Netherlands to be around 7,800 euros, which amounts to just over 10,000 US dollars (Ferwerda et al., 2013).

Perhaps the main reason established publishers have not jumped on the OA monograph bandwagon as fast as journal publishers is the fact that they still make money with print. Every time a scholarly print book is sold, about 45-55 percent of the amount received by the publisher "falls to the bottom line" (Esposito, 2016). Printed volumes typically cost between $80 to $100. Their lifetime sales are typically between 200 to 400 copies, and these copies are usually not sold to individual consumers but university libraries, the primary customers of university presses (Gatti & Mierowsky, 2016). Academic books have always had a high gross margin (what is left after they subtract the cost of operations) and if publishers stopped printing books overnight, they would lose a lot of money. This is why the 'OA monographs are inevitable one way or another' position be taken out of context or misinterpreted. As Esposito puts it: "If [the OA monograph] is indeed inevitable, why is it necessary to work so hard to make it happen" (Esposito, 2016)? One answer to this is that established publishers are committed to developing sustainable OA models that accomplish at least these four things: publish high-quality research; expand readership; increase user engagement; and encourage and develop innovative outputs (Gatti & Mierowsky, 2016). In other words, the same motives that drove that traditional publishing approaches are driving how they want to publish OA: high-quality, wide readership, use and re-use of what is published, and creative and effective communications channels.

When the OA monograph began to make its way into the scholarly community, academic publishers, particularly those that are established and reputable in the scholarly world, thought of

OA monograph publishing as something highly disruptive to their traditional modus operandi. It came as no surprise that they initial reactions reflected caution, doubt, and fear. As early as 2013, studies began to emerge encouraging publishers to offer OA monographs as a *service* to their authors, to not shy away from the sudden availability of the content published OA worldwide but to embrace it and its benefits and to not only publish original work OA but to also convert backlist titles to OA as well (Ferwerda et al., 2013). Regardless of their early resistance to OA, publishers appear to be embracing OA monograph publishing in large numbers, as they did OA journal publishing before it, because they knew along the way that change would take place sooner or later (Collins & Milloy, 2016).

That said, many publishers still tend to have rather conservative views on how OA monographs should be funded in order to be widely available without restriction. For the large part, established publishers find collaborative funding models rooted in library crowdfunding (such as KU) as 'interesting' and as 'trying the address the issue of funding creatively' (Davies et al., 2014), but publishers remain committed to the values they built their business on long before the digital revolution even took place: publishing quality, rigorous editorial standards, and ensuring that they clearly and effectively demonstrate what they offer to authors who sign with them, be in in the context of traditional or OA publishing (Davies et al., 2014). The very existence of author charges (or author fees) attests to the publishers' commitment to preserving the practices that allow them to deliver to the authors the service they expect. This is why the primary source of OA funding for established (also called 'legacy') publishers, has been charging the author (or the funder). And these charges, as mentioned already, vary significantly even within the same publishing house. For example, Brill charges 6,675 USD for a CC BY-NC licensed monograph and as much as 18,000 USD for a CC BY license (Gatti & Mierowsky, 2016). In short, the *looser* the CC license, the higher the cost of production, because looser CC license means more flexibility is given to the user but less flexibility for publishers to recoup the cost of production. And, as also discussed, this creates a certain amount of anxiety for authors, who are concerned that looser licenses for their works may result in users misusing and misinterpreting their research, putting in jeopardy their hard-earned reputation.

Publisher perspectives are very aligned with those of the perspectives of scholars publishing their work. Like scholars, academic publishers care about their books and the

disciplines they cover and invest heavily in staying networked within their disciplines (Collins & Milloy, 2016). And, like scholars, publishers care about quality and insist on not abandoning peer-review and editorial processes, which require significant resources. Publisher perspectives are also aligned with those of institutions of higher learning. Like universities, publishers have a strong sense of identity and how they publish OA needs to sit well with that sense of identity (Collins & Milloy, 2016). Because they know their core business values, many publishers have long specialized in publishing in specific fields. In fact, because publishers are aware of how much quality and reputation matter to scholars and their institutions, they will often go the extra mile to ensure their academic integrity is intact. This is not only true when they publish via traditional channels, but also when they publish OA monographs (Collins at al., 2015). The values they have always adhered to, they argue, must be preserved in the context of OA.

For veteran academic publishers, it's all about fitting OA into existing workflows, rather than disrupting them irreversibly. However, adapting OA into existing workflows is not without its challenges. Other challenges include, among others, providing data on OA monographs sales and usage and raising author awareness. The 2015 OAPEN-UK survey of publishers revealed that providing accurate sales and usage data was a greater challenge for publishers than expected (Collins, *Matched pairs pilot*, 2016), and in order to continue monitoring the impact of OA monographs, knowing if and how they are used is important to everyone, particularly researchers. And the quality of usage data provided by infomediaries (or aggregators) like EBSCO, ProQuest, and JSTOR is not only variable but not easily comparable. COUNTER, for example, which stands for Counting Online Usage of NeTworked Electronic Resources—a standard for measuring downloads—is less useful for monographs than it is for journals because of the ways publishers classify parts of a book (very different to how they classify articles). In fact, some aggregators do not even provide COUNTER-compliant stats to publishers (Grimme et al., 2019).

More information on COUNTER usage stats and their relevance—particularly as they relate to this study—is provided in Chapter 5 (which explains how the JSTOR usage reports are interpreted and used in the quantitative analysis). In the same OAPEN-UK survey, publishers also revealed that raising author awareness of what it means to publish OA works under CC licenses was also a challenge. Raising author awareness requires significant resources, as it needs

to be done thoroughly to help authors make informed decisions (Collins, *Matched pairs pilot*, 2016).

Publishers have also struggled with discoverability of OA monograph content in ways they did not struggle on the journal side. These challenges do not only include issues with the inclusion of OA monographs into library catalogs, but the flow of information 'back' to the publisher, funder, and author. Book publishers have been very slow to adapt DOIs (Digital Object Identifiers)—particularly at chapter level—which have been central to the information supply chain for OA journal articles. In the journal world, DOIs serve two functions: they are unique (and persistent) identifiers for scholarly works (the 'scholarly' function), and they are a 'referral' mechanism by which a researcher may follow a link to get to a work (the 'end user' function). When a reader clicks on a DOI, he or she is guaranteed a direct link to the digital version of the article online. DOIs are more problematic for books that may be found on multiple websites online. Besides, publishers do not have any control over institutional repositories (Neylon et al., 2018). Further, book publishers continue to rely mainly on ISBNs (International Standard Book Numbering), which do not require links to the digital version, and which have been used as identifiers for retailers such as Amazon and Barnes & Noble for a long time (Grimme et al., 2019). The lack of DOIs in the supply chain for OA monographs is a major usability and discoverability issue. Publishers who do not allocate DOIs to their monographs—and their individual chapters—are doing their authors a disservice, not only their potential readers (Grimme et al., 2019).

Publishers who want to increase the usage of their monographs can implement one or both of these two strategies. The first is to work with infomediaries that are currently attempting to systemize monograph discovery, including JSTOR, OAPEN, Project Muse, OCLC, BiblioLabs and the Open Research Library (Gimme et al., 109). By working with these so-called *infomediaries*, publishers can develop business models that help them integrate OA monographs into existing workflows and improve discoverability of their titles. The second is to create a 'parallel information chain' of those established infomediaries in the library world and align more with the tools of the tech giants like Google and Facebook. Regardless of what path publishers choose, in the end it's really the user's choice how he/she wants to get to the information needed and he/she is likely to gravitate toward the path that has the least friction

(Grimme et al., 2019). The Mapping the Free Ebook Supply Chain 2017 study suggested that Google dominated OA e-book discovery, and that other social media channels (e.g., Twitter, Facebook, LinkedIn) also played an important role. Library catalogs, alas, were irrelevant (Watkinson, 2017). The same conclusions about the lack of interest in discoverability in libraries were reached in other studies (e.g., McCollough, 2017) but they left room for optimism about the future solubility of the problem.

Alongside traditional publishers who have embraced OA monograph publishing, several other types of OA monograph publishers have emerged, including 'new' presses, scholar-led publishing initiatives, and the so-called predatory (or vanity) publishers. These new players become an integral part of the publishing community and their approaches warrant thorough examination. New, still emerging presses are the publishers that surfaced in recent years focused exclusively on publishing OA content. Their goals are usually not to stray from traditional publishing but to remain in line with its core values. However, as already noted in the 'Scholar perspectives' part of this chapter, scholars work hard on writing high-quality monographs and expect to be compensated for their effort and contribution. This makes it harder for those new presses not yet associated with prestige to attract top scholars who still gravitate toward reputable publishers to back them up. This, then, causes the scholarly community at large to still perceive OA monographs as not being of the same quality and importance as those published 'traditionally.' And it makes it hard for those presses to be perceived as equal. The bottom line is that established publishers can still afford to attract top scholars and sign deals with them, leaving new presses at a disadvantage.

Another type of OA publishing programs are scholar-led initiatives. Notable scholar-led publishing initiatives that experiment with different business models include Open Book Publishers and Open Humanities Press, both UK-based, and Punctum Books, a US-based publisher that has opened a subscription-like service to which individuals contribute to help sustain the press and its mission (Eve, 2017). A very successful crowdfunding initiative led solely by scholars and focused solely on one scholarly discipline is Language Science Press (LSP). Founded in 2014 by a linguist, LSP is an example of a press committed to community engagement. Its high level of engagement among linguists stems from scholars' frustrations and discontent with current publishing workflows. It also stems from their frustrations regarding the

high prices of monographs and the inability of the publishing community to adequately distribute to scholars worldwide so that they have unrestricted access to the available research in their fields (Adema, 2019). Since its inception, LSP has successfully published hundreds of OA monographs, and their publishing has been supported through crowdfunding by a large number of institutions worldwide, owing in large part, to LSP community proactive approach (Language Science Press website, 2021).

It has been argued that 'author engagement' is key to the success of OA monographs. Many scholars still misunderstand how OA monographs work and what their benefits are, and they have sometimes contributed to spreading misinformation to other authors. Scholars of all kinds need to be properly educated (i.e., "engaged") about the OA monograph landscape and its many facets and benefits (Adema, 2019). "Engagement means going where academics are, it is about identifying research communities and then mobilizing them to help support OA initiatives directly related to their disciplines" (Adema, 2019). LSP is also a good example of a crowdfunding initiative based on author engagement. Some have argued that LSP has taken the idea of author engagement to the next level and turned it into 'community engagement' (Adema, 2019). LSP's very existence stems from linguists feeling they had to do something to improve how their works were being published (LSP's crowdfunding initiative is examined in Chapter 5 as an example of a discipline-driven approach to OA funding; the data on LSP support is compared to the supporting institutions' world ranking for that discipline to determine to what extent they are likely to provide financial support).

* * *

In recent years, the scholarly community has had to deal with the phenomenon of predatory (vanity) publishing, first in the context of scholarly journals and now in the context of all scholarly content, including monographs (although the monograph side still remains less known). Sometimes referred to as the 'dark' side of publishing (Butler, 2013), predatory publishing is associated with "low quality, amateurish, unethical academic publishing" that is usually OA, but it certainly is not always OA, and this is an important distinction (Berger, 2017). It has also been argued that predatory publishing stems from a broader problem, which includes too much emphasis placed on content quality, OA models not being associated with mission-

driven non-profit organizations but based on profit-driven private companies, and the disparities present in developing countries, where scholars are not given the same publishing opportunities as the scholars in the developed world (Berger, 2017). In other words, publishers and scholars who overemphasized quality and reputation—the pillars of academic publishing for decades—are, according to some, the ones who brought on the problem of predatory publishing. However, resource disparities in developing countries should not be overlooked. Many scholars around the world do not have access to 'quality' publishing and their work would be left unpublished if they do not choose 'other,' less ideal options, which sometimes includes entrusting a questionable publisher to publish their work. 2012 was the year predatory publishing is said to have exploded (Butler, 2014) and it has been growing ever since. According to some estimates, predatory publishers produce 5-10 percent of all OA articles (Butler, 2014). It is more difficult to estimate what these figures may be on the monograph side, but it is safe to assume they are on the rise.

Generally speaking, monographic predatory publishing targets scholars who have just completed their masters and Ph.D. theses and want to get them published. Their work is usually published as-is (not edited or copyedited the way scholarly monographs published by established presses usually are) and the way predatory publishers make money is by selling these 'unedited' publications directly to libraries (Berger, 2017). The accusations of predatory publishing hinge on the existence of author fees (again, this relates to the existence of APCs and BPCs), which have, according to some, corrupted the quality-control system of publishing (Barnes, 2018). It is, however, vital to not associate predatory publishing with OA, as many see this as a simplistic, one-sided argument. In fact, available literature often alerts to this: predatory publishing should be completely unconnected from OA publishing (Collins et al., 2015).

Many 'predatory' publishers' main motive is to make as much money fast, bypass peer-reviewing and editorial processes, spam authors with email invitations to submit papers and monographs, and charge fees that are often not clear at the onset of the publishing process. That said, some of those publishers start off "insufficiently rigorous" and over time rise to the occasion and raise their standards (Butler, 2013). In other words, some *predatory* publishers should be given the benefit of the doubt. The key to understanding the motivations of predatory publishing is, of course, education. Libraries are uniquely positioned to educate all users—especially scholars—about predatory publishing (Berger, 2017) and its traits and about

publishing not being a market of “good” players and “bad” players but a market made up of many complex and moving parts.

The emergence of predatory publishers has also led librarians to awaken to the importance of carefully evaluating OA offerings, particularly on the journal side of publishing (Johnson, 2009)—and more increasingly on the monograph side as well—since the intent of many OA publications is to trick scholars into thinking they are ‘legitimate scholarly outlets’ (Grabowsky, 2015). Collection librarians have played a vital role in selecting high-quality resources for their institutions and their roles required them to be very versed in the offerings, but the emergence of new kind of publishers with questionable motives has made it more imperative to filter available materials and require all to adhere to the highest standards of academic publishing. The major issue with predatory publishers, therefore, is not access but quality control. The main issue is that predatory publishing reflects problems that have long existed in the scholarly research community. In fact, lack of quality control has been present in all spheres of scholarly publishing. Scholars are always under pressure to publish new findings, they have little time to repeat experiments or replicate studies, and peer review can be very time consuming, not to mention it is not financially rewarded, so it lacks motivation. All of these factors contribute to the lack of quality control that is needed all around, not only in the so-called ‘predatory’ arena (Kingsley, 2015). Scholars have pointed to examples of inadequate peer review in both traditional and OA journals (Kingsley, 2015) and studies have called into question the fairness, trustworthiness, and accuracy of the peer review process in the past (*Economist*, 2013).

No conversation of publisher perspectives and publisher challenges is complete without the mention of what many rightfully think of as the biggest (yet invisible) gorilla in the room: the so-called pirate black OA market. While predatory publishers often mimic the work of established publishers to chase fast and easy profit, pirate sites that offer scholarly content for illegal downloading—of which Sci-Hub is the most well-known—take advantage of the technology to distribute the content without any barriers. Although the music industry went through something similar in the 1990s but has since been able to transform itself and adopt to the rules of the new digital world (Gapper, 2017), the publishing industry not only continues to struggle with piracy, it seems to be losing the battle (Green, 2017). While Sci-Hub continues to grow at an alarming rate, harvesting nearly all of scholarly literature (Green, 2017) and offering

illegal access to millions of scholarly publications, many scholarly publications that could and should be published OA remain paywalled years after their publication. There are currently under 37,000 peer-reviewed books listed in the Directory of Open Access Books (https://www.doabooks.org). As low as this number seems in comparison to the sheer volume of have seen significant growth over the years (Lamani, 2018; Tsuji, 2018), particularly in English, French, and German and in the following disciplines: sciences, social sciences, and history (Tsuji, 2018).

It is not to say that green OA and gold OA (and, lately, diamond OA) have not made great strides, they just haven't made them fast enough and efficiently enough, which has led some to proclaim that black OA has trumped both green and gold OA (Green, 2017). As Green put it, "It is time to recognize that, in this age of digital disruption, there must be something structurally wrong with an approach that after two decades of collective effort has yet to reach base camp." He also concludes that only one actor is needed to reverse the ugly trend: the publisher. It is up to the publisher to trump black OA by making a basic, legal version for anyone to read, with would make the pirate sites such as Sci-Hub simply redundant (Green, 2017).

While librarians can certainly educate the users and faculty about the benefit of OA publishing and promote its cause, it is up to the publishers to ensure that quality OA literature continues to be produced and distributed. Without the publishers' *openness* to the very idea of openness, both predatory publishing and black OA will persist. In other words, by legally 'opening' their content and utilizing effective and not risky business models, publishers are in a powerful position to make sites such as Sci-Hub obsolete and to win the war against piracy.

Librarian perspectives

Libraries have so far played a clear role when it comes to closed academic content: they buy books and other scholarly content and make it available to their users and/or members of their institutions. Librarians' role has always been to purchase academic books in printed format, catalog them, and place them on the shelves where they can be visible to users. Open access to academic content has expanded the role of libraries in recent years as they are no longer merely in charge of buying books and renewing subscriptions to journals, digital resources, and

databases. Although libraries participate in the decision-making process related to all aspects of OA publishing and its development, their OA-related roles are still being defined (Bulock, 2018). It is evident that librarians are no longer the professionals seeking funding from donors to cover the cost of their libraries' operations or to purchase print materials or subscription products. Instead, they have become the 'ones' expected to set aside their own funding to support the initiatives of others, in this case the authors and publishers whose books are published OA thanks to libraries' contributions. Libraries have been participating in OA publishing by offering funds to authors affiliated with their institutions to offset the cost of author fees asked by publishers, and this has especially been done more in the context of journals (Bulock, 2018). That said, librarian roles on all fronts related to OA are expanding and evolving, including OA monographs.

Schmidt, Sennyey, and Carstens outlined three possible scenarios that would affect how OA impacts libraries: 1. The OA movement will fizzle out; 2. The OA movement will be a big success; and 3. The OA movement will partially succeed, resulting in a mixed scholarly communication system that embraces the elements of both traditional and OA publishing (Schmidt, Sennyey & Carstens, 2005). Today, we can safely say that the first scenario did not take place. The OA movement most certainly did not fizzle out; instead, it has become more robust, more prolific, and comprises an array of scholarly content. While the OA movement has triumphed in many ways, the third of the three possibilities also holds true. OA perspectives vary greatly among scholars and publishers, as well as among librarians. When one reviews available literature on the subject, one concludes that more time and experimentation is needed to achieve optimal results and all sides still place great value on traditional publishing, which isn't quite being replaced with OA publishing.

Significant progress has been made on the OA front for sure—and librarians have viewed OA favorably from the onset (Monson et al., 2014)—but the traits of traditional publishing and traditional roles in publishing (including those of libraries) still linger and librarians have concerns about OA monograph publishing that are both logical and valid. In 2010, Adema and Schmidt published a paper on the role that libraries play in HSS book publishing, relying on the research conducted by the Open Access Publishing in European Networks (OAPEN) on OA book publishing and business models for scholarly books. The establishment of OAPEN was co-

funded by the European Union, in an effort to develop an OA model for peer-reviewed scholarly books in HSS fields, and OAPEN was the first project of its kind to implement an OA monograph model. Its objective was to "improve the accessibility, usage, and impact of European research in HSS through the promotion of OA for monographs" (Ferwerda, 2010). When first launched, OAPEN had two key goals: the qualitative goal was to encourage all stakeholders actively rather than passively to participate in the publication of OA monographs (this included developing collaborative funding models), while the quantitative goal was to host peer-reviewed HSS OA publications from all over the world on one hosting platform and make them available through its Online Library (Ferwerda, 2010).

The goal of the study was to better understand librarians' motives and challenges in their efforts to facilitate HSS book publishing OA. Their 2010 statement that "the quest for sustainable business models and funding of OA publishing is ongoing" (Adema & Schmidt, 2010) rings true over a decade later (and are echoed by the librarian survey presented in Chapter 5; 5.3). The challenges librarians faced then (and that they largely face today), include, among many others, inadequate budgets (which are heavily used for journals), management of copyright (for new titles, specifically, there is an opportunity to open up content in new ways that were impossible under traditional publishing modus operandi), cultural differences and perceptions between libraries and scholarly presses, and detecting and acknowledging strong brands associated with OA book publishing in order to minimize marginalization of such content.

What follows is a listing of key librarian perceptions and the issues they face in figuring out how best to incorporate emerging OA strategies into their operations—organized sequentially to reflect their train of thoughts.

How can OA prevail, when faculty still want print books? Academic librarians have noted in surveys that even as OA monographs became more prominent, scholars still wanted print counterparts. In fact, academics are known to buy their own copies of books (Collins et al., 2015) and still have a strong emotional attachment to the monograph as a physical object. However, OA books are only free when accessed digitally, which means that publishers are still able to produce print copies and charge for them as they see fit. In fact, many embrace the hybrid model (known as the *freemium* model), which allows them to publish books OA and still sell their print counterparts.

How can OA be funded when faculty have their non-OA expectations that libraries must meet first, often on tight or increasingly shifting budgets? Librarians have noted that dealing with academics has not always been easy as they tend to be picky when selecting books for acquisitions. This is mostly the case in the HSS fields. As a result, librarians noted that the collections they build did not always reflect students' interests but the faculty's specific research interests and/or their specialties (Collins & Stone, 2014). This is an ongoing issues, as explained in the "Scholars perspectives" part of this chapter. Scholars have come a long way in recognizing the value of OA publishing, but more education and advocacy is needed to get them to fully understand the drawbacks of some old practices.

What good is content in general if libraries cannot provide access to it at the point of researchers' need? Researchers and students always want to be able to access the materials at the point of need (i.e., on any device, at any time, when and where needed). Licenses for content purchased for libraries traditionally did not always allow for this flexibility, which means libraries could not always meet the needs of those they served (JISC, 2014). This has made librarians' jobs more challenging as they could not meet user demands (Collins & Stone, 2014). Unlike traditional content, OA content makes it possible for libraries to meet the research needs of their communities, since OA books, if licensed properly, can indeed be accessible by anyone, anywhere.

What good is content if users or faculty can't do with it what they want and/or need? Librarians have been very vocal about Digital Rights Management (DRM) restrictions which many scholarly non-OA e-books are coded with, limiting what users can do with the content once they open it (e.g., ability to print, copy, download). Karen Coyle has pointed to three significant challenges that DRM already poses for academic libraries acquiring non-OA content: 1) local control (DRM systems are not always affordable to libraries, and the control remains in the hands of the vendors that supply content to libraries); 2) contracts (Libraries may need to negotiate rights for each publisher, and in some cases on a title-by-title basis); and 3) archiving (How will e-books be made available to future generations if they are coded with DRM restrictions?) (Coyle, 2003). Unlike traditional non-OA content, OA content makes it possible for users to share OA monographs as needed, online and offline, giving them the freedom to cite, copy, download, print, etc. But there are restrictions dictated by the Creative Commons licenses,

which make the OA and DRM relationship rather complex, and which is why some OA advocates find DRM to be the enemy of OA, as they believe it goes against the promotion of open science and open research.

OA and DRM may at first seem conflicting in purpose, but the two "complement rather than compete with one another" (Roncevic, 2019). The DRM technology ensures that the various CC licenses that OA publications carry are easy to understand and that it is clear to users what they may do with OA content. In this sense, "OA is really about the appropriate DRM, not necessarily no DRM" (Roncevic, 2019). As Keele and Odell put it, the role of DRM is to help the scholarly community better manage rights assigned to OA works. And again, librarians are expected to manage this aspect of OA. Their new role becomes to convince authors and publishers to make a work OA with appropriate DRM (this gives librarians the role of 'license advisors') and also to be able to recognize when DRM negates access to an OA work. This gives librarians the role of 'DRM-free advocates' (Keele & Odell, 2016). Some have creatively described the complexity of the OA-DRM relationship as follows: "the most widely used DRM approach in OA publishing is the Creative Commons license" (Keele & Odell, 2016).

How can libraries serve the needs of an increasingly global (rather than local) scholarly community if they do not all have the same capabilities and budgets? This so-called 'international challenge' has become an essential argument of the OA movement. One of the key tenants of the OA movement is to solve the problem of access gaps, which are asymmetrical around the world (Suber, 2012). Barriers to access are indeed real for scholars in developing countries (Edward, 2014). And just as those scholars are not able to access the same literature as those in affluent countries, their institutions do not have the resources or budgets to buy access to content. OA content solves this challenge by making science open to those researchers, regardless of whether their institutions financially support OA initiatives.

Why should authors pay any fees to publish their content? The simple answer to this is that the cost of publishing professionally and in ways that preserve scholarly integrity must be absorbed by someone. If the author does not step up to the plate, his institution can at least make the effort, in fact, to back him/her. Libraries can have profound influence in this process and have shown support for it early on (Monson et al., 2014). After all, their roles as the "guardians" of knowledge is called into question here. If scholars do not get the funding to publish their research, how will their knowledge be available to other scholars? What is there to guard if this

knowledge isn't constantly moving in all sorts of spontaneous directions? There is, however, the opposite side of this argument. If the libraries' key motive is to 'support' their institutions' scholars and their needs, where does that leave the needs of end users/readers/students? This calls into question whether libraries are fulfilling their missions when it comes to OA if they are mostly interested in offsetting author charges vs. if the content is widely available worldwide to all readers, regardless of whether their institution immediately benefits from it. In an ideal scenario, the two missions coexist: libraries must constantly find ways to balance the needs of the faculty and teaching staff with the needs of library patrons and end users. While they are not always in sync, they are equally important for the long-term sustainability of OA content.

Why pay for OA content when it will be free anyway? This is known as the "free rider" problem. Some libraries may not want to pay to invest in OA material when they can access it for free. One can argue here that collaborative funding is one solution to this issue because forming a 'library consortium' where everyone contributes a small amount (vs. a handful of institutions with larger amounts per institution), resulting in books being published OA (Eve, *All That Glisters*, 2014). On the other hand, crowdfunding can be problematic as it may also encourage more sentiments of this nature: that some libraries will not participate in the hope that others will. In other words, they will support the new idea and stand behind it in theory; however, they cannot support it in practice, usually due to lack of funding.

Why should some libraries carry the burden of investing in OA more than others? Some libraries remain skeptical about a collaborative approach to funding OA model because they believe it could be based on regular donations from the same institutions (often those that can set aside more funds for OA), while the majority of others will benefit in the long run without active contribution (Grabowsky, 2015). Indeed, the cost of publishing has to be covered somehow, as it is simply impossible to publish something 'for free' without accruing production costs. This means that when costs are shifted from readers to researchers (those producing the content), the burden of funding must fall on someone and some predicted years ago that it would likely fall on research intensive universities that produce the most research (Davies et al., 2014). In this sense, OA materials ought not to be thought of as completely 'free' since there are serious costs on the library side associated with selection, description, cataloging, and overall

maintenance. And like purchased or subscription-based materials, OA materials must also be evaluated for weeding or cancellation purposes (Grabowsky, 2015).

OAPEN-UK 2014 librarian survey revealed 82 percent of librarians would support the development of a central institutional repository for OA scholarly books, as they had previously done for journals. After all, academic librarians are the ones who manage repositories and it is not uncommon for librarians to provide guidance to faculty on how to self-archive, particularly to those that are not yet tech savvy and have little or no interest in engaging in the technicalities of the process (Kim, 2010). The OAPEN-UK 2014 librarian survey revealed how positive librarians were about OA monographs in their nascent phase (Collins & Milloy, 2016). The same survey also showed that 80 percent would support OA monograph publishing as a matter of principle, while 96 percent would support OA journal publishing in principle. At the time this survey was conducted, librarians had already had more experience with journals, so it came as no surprise they had such positive attitudes about their OA future. But as the survey clearly revealed, librarians were willing to embrace OA monographs in the face of uncertainties, lack of experience, and pressures imposed on them by demanding scholars, rising costs of monographs, and limited library budgets.

New opportunities for libraries

Clearly, librarian roles have been evolving alongside their maturing perspectives. All these challenges and issues have helped not only give librarians more say in the decision-making process, making them more proactive and directly responsible for shaping the future of scholarly publishing, it has also given them new purpose and created new opportunities for them to redefine and expand their roles. In fact, the OA movement has helped libraries become an essential part of the publishing ecosystem the way they had not been before. Based on what previous studies and surveys have revealed, several new roles and opportunities now exist for librarians and they are tightly connected to OA publishing: 1) educating a new generation of users, whose expectations are vastly different from those of the generations past; 2) educating scholars who still have doubts about OA publishing; 3) collaborating with others to further the mission of the global OA movement; 4) helping to make OA content more discoverable as its value is only realized when it is used worldwide; 5) advocating for OA and influencing the

emergence of new and alternative business models; and 6) taking on the roles of active funders of OA who skillfully navigate the intricacies of demanding yet shrinking budgets to make room for supporting OA content, including monographs.

Educating users. The OA landscape has grown more complex over time, and users—including students and researchers who are library patrons—still have a very limited understanding of the basic tenets of OA publishing (for journals as well as monographs). In an age when pirate sites like Sci-Hub continue to persist and are heavily used by students all over the world, including the most affluent universities (Bohannon, 2016), it is imperative for librarians to educate users that the OA movement is working hard to make quality scholarly content available freely yet legally, thus not endangering scholars and publishers. The fact is: most readers have little notion of the long-term and communal efforts made by various OA stakeholders to allow them to legally access an OA book or an OA article. The reader must be successfully connected to the book and the stakeholders, including librarians, need to make clear to the user the degree of access being offered and the mechanism in place to make it happen. The reason this is important is because it is precisely the user's understanding of *licensed* access that will inform his/her subsequent attitude toward usage (O'Neil, 2016). Users usually are not even aware that 'free' content may be legal yet still licensed. Yet this is the most fundamental idea of OA.

Educating scholars. As noted, there is still a degree of ambivalence among scholars about OA publishing. But ambivalence provides a "teachable moment" for libraries as they can take the opportunity to lead conversations about OA at their institutions when it comes to monographs, just like they took an active role acquiring OA journals and supporting their migration to OA (Tenopir et al., 2017). Librarians are seen as the glue that can hold the various parts of the scholarly communications together by engaging scholars, bridging the 'credibility' and 'reputation' gap between established and emerging ideas, shifting acquisitions budgets from closed to open models, and acknowledging real and justified differences between scholarly disciplines. In order to bridge the 'credibility' gap, libraries need to support prestigious OA publishers and their robust peer review processes, insist on transparency every step of the way, including clarity regarding pricing, quality assurance, and available licensing, and, lastly, by continuing to demonstrate the impact of OA to scholars in their communities (Ferwerda, 2013).

Further, the existence of predatory publishing is another opportunity for librarians to educate all users—from undergraduate students to faculty—and dispel inaccurate notions about OA, one of them being that OA content is inferior to traditionally published content. In the end, as Berger puts it: "pushing predatory publishing out of the shadows and into the light advances scholarly communication one step further towards a more humane and scholar-centered system" (Berger, 2017), which leaves room for a new generation of publishers and authors (who early on may be perceived as too radical in their views and approaches, as independent thinkers and innovators often are). The bottom line is that librarians have made great strides in identifying what their constituents want and have, in fact, become more skilled at satisfying their needs with great efficiency (Esposito, 2016) and dispelling the myths surrounding OA monograph publishing. Academic librarians have been in the prime position to watch the dramatic changes in academic publishing for well over a decade and they are perhaps the most *qualified*, given their experience with acquiring and managing content to spot a publisher with questionable motives (Butler, 2013).

Collaborating with others to support and experiment with OA. Libraries have long been encouraged to explore opportunities and share experiences and resources with other institutions to improve services and dissemination strategies (Adema & Schmidt, 2010). In fact, the idea of collaborating with others to better understand the possibilities with OA is not new to libraries, and collaborative/crowdfunding global initiatives such as KU have now had a number of years of practice and trial-and-error behind them. Libraries can collaborate with others for the benefit of OA publishing in many ways. Although this study focuses on the ways in which libraries collaborate with other libraries (i.e., libraries joining forces to form a global consortium; this is sometimes also referred to as cross-library or cross-institutional collaboration), there are other types of collaborations that can exist simultaneously, including, for example, library-university press collaboration (e.g., University College London Press, UK; Aalborg University Press, Denmark; Lapland University Press, Finland). The goal of these collaborations with university presses is to experiment together with OA in order to increase the visibility and impact of the scholarly books that would otherwise only be published in small print runs with marginal sales and no royalties to authors (Ferwerda et al., 2017).

Making OA monographs more discoverable. To measure the impact of OA monographs over time, books must not only be published as 'open.' They must also be discoverable. If users and scholars are not aware of their existence and are not able to 'discover' them and use them during research, their impact will be minimal at best. Therefore, librarians have another role to play in ensuring that monographs are disseminated and made discoverable through as many channels as possible so that they reach large numbers of users. This includes incorporating OA monographs into library catalogs (Ferwerda et al., 2017). As stated in the "Publishers perspectives" part of this chapter, the issue of discoverability of OA monographs has been an obstacle for the publishing industry, which remains torn between the need to work with tech giants like Google (which still drive much of the discoverability of their content) and library infomediaries (e.g., EBSCO, ProQuest, JSTOR) to make sure the right content reaches the most suitable audience. Although worrisome at first (McCollough, 2019), libraries' attitudes about discoverability of OA content have improved, and many "infomediaries" (companies and organizations tailoring to libraries) are helping libraries to improve discoverability of OA monographs through full integration into library catalogs.

Further, when librarians invest in the discoverability of OA content, they are also helping to eliminate black OA, because as long as pirate sites like Sci-Hub do a 'better' job of meeting users' needs (which are always linked to their desires to access the literature without any restriction or barriers), libraries' existence and usefulness will be called into question. While it is challenging to compete with Google on the discoverability front, libraries are well positioned to compete with illegitimate sites by making the growing number of OA titles available directly through libraries and in ways which are not only legal but also user-friendly, providing safe environments for browsing and downloading (a notable disadvantage of pirate sites is that they are often laden with viruses and may put users' privacy in jeopardy).

Advocating for OA. Although not the founders of the OA movement, librarians have always been vocal about the benefits as well as the challenges of OA. They have also begun to be more proactive in helping to shape new and emerging business models. Berger argues that when librarians take active roles as advocates of the kind of 'alternative' OA models that aim to eliminate author fees and shift the burden from authors to institutions (like KU, for example), they help de-commodify scholarship and "mortally wound" predatory publishers' viability

(Berger, 2017). In this sense, the answer to the predatory journal publishing crisis is the support of models that eliminate APCs and BPCs, and the only way for them to be 'eliminated' is for someone other than the author to absorb the cost.

A 2015 international survey of 149 librarians showed that 23 percent of the respondents offered OA funding to authors provided by institutional administration, library or various departments, and one-third of these had established criteria for funding (Lara, 2015). The study also revealed while librarians had differing views about the extent of their involvement in the publishing process and financing author fees, the majority felt the library was the important advocate for OA publishing in their institution (Lara, 2015). In fact, a study conducted a year earlier found that librarians had become "ambitious advocates" who hoped to bring "significant changes in campus culture," while others took a more sensible, realistic approach and focused on convincing faculty to support OA publishing as a viable, rather than, the ultimate, option (Monson, Highby & Rathe, 2014).

Further, librarians can advocate for more transparency regarding the availability of OA content. Publishers may not always be sufficiently *transparent* about their services and pricing models and librarians are not always clear on what they are purchasing and what titles from the backlist that they or other institutions may have already bought are being converted to OA (Ferwerda et al., 2017). There have certainly been instances where one institution pays to convert a title to OA, while another still pays to maintain a *paid subscription* to a title that should be freely available worldwide. This phenomenon has been called *double dipping*. It occurs when an author's fee has been paid for a book (or journal) to be available to users for free (i.e., published OA), but the publisher of that book then charges other users to read that article through a subscription (Eve, 2021). It is precisely librarians' advocacy regarding this issue that led to the formation of the so-called Anti-Dipping Alliance, a group of various organizations and companies catering to libraries that are committed to avoiding unwanted acquisition of books through different systems. Members of the alliance include Delbanco, JSTOR, Knowledge Unlatched, LM Information Delivery, OAPEN, Project MUSE, and others (Anti Double Dipping Alliance PR, 2018).

The issue of transparency also extends to users. Just like publishers need to be transparent with libraries about how they publish OA and when titles migrate to OA, libraires must be transparent with users about what it means to access an OA book (O'Neill, 2016).

Funding OA. In addition to being committed to absorbing the cost of author fees, libraries are now taking active roles in funding various OA initiatives, even if they do not directly benefit their own scholars. For example, there have been suggestions encouraging librarians to set up institutional presses (promoting the idea that library can act a publisher) in an effort to encourage the publishing of their community's research; taking an active role in depositing monographs into institutional repositories the way it has been done with journals (bearing in mind the limitations that come with that); and, of course, funding OA monographs by taking part in global initiatives that continually test new business models and new possibilities with OA (Collins & Stone, 2014).

The chief obstacle in the transition to OA is, of course, the cost of monographs, the availability of funding, and tight library budgets. All three of these issues are interrelated and have to do with money. Although requiring complex operational changes, substantial library funding is still received that, some have argued, could be re-routed—or repurposed— to pay for the publishing of monographs more efficiently. The reason behind this is the awareness that university library books budgets have usually been more flexible than journal budgets, since they are not as tied up with long-term subscriptions (Farrell, 2019). A key to moving forward in this regard will be the support from university administrators, which include top-level decision-making librarians (Ferwerda et al., 2017).

* * *

To conclude, for librarians, OA has been the basis for strategic engagement, as there is an increasing need for librarians to proactively engage in conversations which place academic authors (faculty) and future scholars who are current students at the heart of libraries (Smyth, 2016). Although working with academic authors is not always straightforward or easy (Posner, 2013), there is a need for collaboration and librarians will remain the drivers of this collaboration. In order for any OA undertaking in the library, and involving faculty, to flourish,

the relationship between the librarian and the faculty needs to be equitable (Posner, 2013). In addition, as it is evident how complex the role of librarians has become in the evolution of the OA scholarly book and digital humanities, it is also important to recognize librarians' efforts along the way so that lack of incentive does not deter them from continuing to actively engage in OA. If the librarian's institution is not providing the support and recognition for the librarians involved with innovative digital projects, it is difficult to see what would motive them to commit to such demanding work moving forward (Posner, 2013).

Librarians do not need to take the lead on the OA front as they have enjoyed leadership roles by actively influencing and developing OA policies (Pinfield, 2015). They have been responsible for managing institutional repositories, negotiating with publishers, administering funds for payment of APCs and BPCs, educating faculty and users, and advocating for more access to scholarly literature. In addition, they have even founded and led OA publishing services at such research-intensive institutions as the University College London (Ayris, 2014) and participated in cross-institutional OA initiatives that sought to advance library-based publishing (Mullins et al., 2012). In short, libraries have made a big difference in how the story of the OA monograph has unfolded and will clearly be the ones having a major influence on how the rest of the narrative unfolds.

The impact of OA monographs

The impact of OA publications and their performance has been studied extensively over the years, particularly relating to citations, usage, and sales of print counterparts (i.e., versions of OA monographs available in print). That said, there is currently no one agreed way to "demonstrate the value of the monograph to research" (JISC, 2014). The impact of OA was for a long time most vigorously studied in the context of the performance of academic articles or academic journals available through various digital platforms or national repositories (Click, 2019). Many studies have addressed the impact of OA articles and journals for academics and the institutions that support them, and questioned, among other matters, whether academic articles and the authors whose work is published in OA journals are more cited than those that appear in non-OA journals (e.g., Harnad & Brody, 2004; Hajjem et al., 2005). Those early studies showed that OA articles had a clear advantage over non-OA articles in a variety of disciplines, even outside the

STEM field, and that a substantial amount of potential impact is being lost for at least 80 percent of non-OA articles (Hajjem et al., 2005).

Harnad and Brody's 2004 study compared the citation counts of individual OA and non-OA articles appearing in the same journals and showed significant citation advantages for OA vs. non-OA articles. Later studies further confirmed what is now a widely accepted fact: OA articles see higher citations (Swan, 2010; Xia & Nakanishi, 2012). Also, articles in high-ranked journals do not have a higher OA rate, and articles in lower-ranked journals have a greater increase rate of citations if they are freely accessible (Xia & Nakanishi, 2012). Not as many studies have dealt specifically with the impact of OA monographs, but several leading studies have emerged in the past few years focusing exclusively on the value and the impact of OA monographs. As Eve notes, "to study ourselves, as humans, is the mission of the humanities subjects in all their diverse breadths, so the fundamental question that should move us in the quest to support the OA monograph and understand its potential impact should be "What good is research on the human, if our fellow humans cannot afford to read that work?" (Eve, 2017). As predicted years ago, the development of the OA monograph does not only disrupt traditional publishing, shift roles, and require self-reflection on the part of scholars and publishers, it changes the shape and form of the monograph itself, calling into question if the definition of the monograph will change over time along with the business models that ensure its sustainability (Grimme at al., 2019). Does this mean, for example, that they will eventually become shorter? More fragmented? These are some of the emerging questions to which there are currently no clear answers.

When measuring the impact of OA monographs, researchers often encounter unexpected obstacles as the metrics landscape of OA monographs brings about unique challenges that do not exist in the metrics landscape of OA journals. When measuring citations, for example, books often perform poorly for the simple reason that citation databases do not include books in adequate numbers. Not only is coverage incomplete, but it can also be inaccurate (Montgomery, 2013. The STEM fields began to measure article citations in the 1960s and have had a lot of practice to perfect the system; in contrast, monographs have developed at a slower pace. In fact, monographs were first added to the Web of Science, the website previously known as Web of Knowledge that provides subscription-based access to multiple databases with comprehensive citation data for various academic disciplines, in 2011 (Montgomery, 2013). For STEM articles,

it has become relatively easy to get article-level abstracts, DOIs, and citations, but the same cannot be said for monographs. This means that to measure the correct impact of OA monographs, the industry must overcome some real challenges and come up with feasible solutions.

There are several areas where OA academic books pose unique challenges that are not present with journals. These include: 1) books are not always available on the publisher's web site (i.e., their online presence is not always controlled by the publisher) but instead they may be available simultaneously on various online platforms (including those by aggregators, distributors, or even other publishers); 2) the infrastructure for cataloging and discovering OA scholarly books is more recent than that for journal articles, which automatically means it is less dependable as it is still being developed. Monograph publishers often depend on the infomediaries (middlemen) for distribution and have little experience with book distribution; and 3) monograph publishers do not really interact with readers directly and instead have always been focused on selling print copies to intermediaries, so the impact of their publications is still driven a great deal by physical distribution (Neylon et al., 2018). Two logical ways to solve these challenges and move forward in an attempt to 'track' the life of a scholarly book is to a) invest in consistent bibliographic metadata and b) to invest in OA discovery platforms so that OA monographs can be as visible as possible (Montgomery, 2013). Here, again, the issue of discoverability and the importance of making OA content visible to users via libraries becomes evident.

OA monographs and their impact have been the focus of several studies in the not-so-distant past, including for example, the two already mentioned OAPEN studies: one in the Netherlands (Ferwerda et al., 2013), the other in the United Kingdom (Collins & Milloy, 20156). The OAPEN-NL project concluded in 2013, while the OAPEN-UK project concluded in 2015 and the final report was published in early 2016. Both of these studies showed a promising future for OA monographs, but it also became clear that more time was needed for OA monographs and their business models to mature. The OAPEN studies examined the impact of OA monographs by focusing on whether the print sales of monographs are affected if they are simultaneously available OA (i.e., the digital counterpart is freely available online and may be accessed or

downloaded by users). In other words, those studies mostly focused on examining if books published OA cannibalized the sales of their print counterparts.

One of the shortcomings of these early studies of OA monographs, as observed by some scholars, was that they were conducted by the parties interested in promoting the principles of OA and they had a vested interest in seeing OA succeed (Eve, *OA and the Humanities*, 2014). After all, the initiator of those studies was OAPEN (Open Access Publishing in European Networks), an established and well-known platform for hosting OA monographs respected in the library world across Europe. For this reason, these early OAPEN findings were often considered provisional and not necessarily representing the full picture. Still, these early studies serve as a valuable starting point for future studies (Eve, *OA and the Humanities*, 2014).

The aim of the OAPEN-NL project was to gain experience with OA publishing of monographs in the Netherlands. Publishers and authors who participated in the OAPEN-NL study were asked to complete comprehensive surveys, which made up the qualitative part of the investigation. In the period between June 2011 and November 2012, 50 OA monographs were published OA by nine participating publishers. The quantitative data received from the participating publishers showed no significant effect of OA on print monograph sales, but it showed a significant increase in the usage of the free online version (this referred to the number of times the OA books were opened on Google Books). The study's recommendations for librarians included, among others, to continue investing in OA monographs and to support consortium initiatives that rely on crowdfunding on a global level to publish monographs OA. The study also showed no citation benefit when a monograph was published OA, which contradicts what previous studies showed for journals (e.g., Harnad & Brody, 2004; Hajjem et al., 2005). This was a bit of a surprise since 94 percent of the authors who participated in the qualitative part of the study said they expected to see a rise in citations (Ferwerda et al., 2013).

The OAPEN-UK project was in many ways the continuation of the NL project, with one notable difference: it introduced "the concept of matched pairs," in which profiled monographs were compared with one another. Five publishers submitted pairs of titles to the pilot, matched as closely as possible in a number of areas. 45 of the 90 titles constituted the experimental gold OA group, while the other 45 constituted the traditional, "purchased control" group. The team randomly selected one title from each pair to be made OA and the other title was used as a

‘control.’ Most titles had already been published upon entry into the project, with the majority being one-to-two years old. The study relied on publishers to supply sales and usage data they received from sources like Google Books and the OAPEN platform. Over three years, sales and usage data were gathered to understand the implications and consequences.

This layered five-year inquiry into OA monograph publishing—which began in 2010 and ended in 2015—suggested that if the scholarly community were to move to OA monograph publishing three things needed to change: attitudes and perceptions of all in the publishing ecosystem; systems, policies, and processes the scholarly community has relied on for decades and refused to adjust to; and, finally, more business models needed to be tested to see what would ultimately work and how (Collins & Milloy, 2016). The study’s finding was that the effect of OA on print sales within the sample was insufficient to overcome the known variability of monograph sales (Collins & Milloy, 2016; *Matched pairs pilot*).

The OAPEN-UK matched pairs study also found that the usage on the OAPEN platform grew relative to the usage on Google Books for most publishers during the project. Further, OA does not appear to have an effect on whether a book is discovered, but it may have an effect on how much the content of the book is accessed. The study ultimately concluded the following: OA was unlikely to affect print sales; use of OA books appears to be growing online; and OA does not seem to increase discoverability, but it does seem to increase the amount of a book used. “We believe this is an opportune time for publishers to experiment with a variety of business models,” stated the study’s leaders at the time, encouraging libraries and institutions to begin supporting cross-institutional (or collaborative) projects aimed at making OA monographs widely available, which was seen as crucial to the future sustainability of OA publishing (Collins & Milloy, 2016).

The usage data in the OAPEN-UK study was collected from the participating publishers, not institutions, which means their main goal was not to show where exactly the books were used but which books, how often, and how exactly. The study’s recommendations for further research included collecting usage data from platforms and aggregators/vendors on user behavior; looking at both front list (born OA) and backlist (already published in print) titles, and titles which have been available online for different amounts of time. The study also proposed how business models for OA monographs should move forward, encouraging the protection of the main

elements of publishing that matter to scholars; recognizing the international nature of research and publishing; and asking libraries to work collaboratively with others, recognizing that OA is a wide ecosystem with many global players (Collins & Milloy, 2016). It is from this confidence and belief in the power of international collaboration that the library crowdfunding business model was born and the very idea of libraries worldwide joining forces to fund OA monographs to everyone's benefit.

A 2017 Knowledge Exchange landscape study of OA and monographs in eight European countries—whose two key objectives were to analyze existing information about the inclusion of OA monographs in OA policies, funding streams to support OA monographs, and business models for publishing OA monographs—found that any discussion of the impact of OA monographs and the business models related to them varies greatly by country. This is because national policies on OA are not consistent across the board even among the members of the EU. While similar in many ways, there are significant differences in size, book markets, funding streams, and publishers' approaches and perceptions of OA. Likewise, there are big differences within individual countries, only proving further that even when substantial funding is available (e.g., in Austria), re-routing it can be a major challenge and also proving that no single model will fit all (Stern, 2017). Further, the very definition of the term 'monograph' differs in the countries which the study covered: Austria, Denmark, Finland, France, Germany, Netherlands, Norway, and the United Kingdom (Ferwerda et al., 2017). The study recommended that a deeper understanding of the differences between countries was paramount in order to continue promoting policies and business models that can be adopted across those countries. "Europe is a beacon in this space," concluded the study's leaders, "and others will follow" (Ferwerda et al., 2017).

The 2017 Knowledge Exchange study in in Europe was followed a year later by a survey (conducted between April and May 2018) that served to identify the next steps to be considered in the efforts to advance the publishing OA monographs. The survey received 233 responses from 25 countries, most of which were in Europe and the UK and most of whom were academic libraries and universities, but authors and publishers were also represented. The survey's key finding was that 75.1 percent of respondents felt that the steep cost of monographs was the main obstacle holding back the progress of OA monographs (Stone, 2018). Other concerns expressed

by the participants confirm already discussed and known scholar, publisher and librarian perspectives:

- Quality of scholarly content was of high importance to authors and readers. Issues around quality and peer review were seen as major blockages to OA monographs.
- Publishers ranked the effect of OA monographs on sales and bottom lines as an important issue.
- Traditional publishers were criticized for the lack of transparent business models.
- University presses and scholar-led publishing initiatives offering OA monographs were seen as a positive approach, but the lack of institutional support remains an issue.
- There were mixed views around author awareness and engagement. At best, academics supported OA monograph publishing fully once they became aware of its benefits. At worst, however, they remained ambivalent and indifferent, even hostile to OA as they perceived it as harming their academic careers.
- There were lingering concerns related to the business model of OA monographs, particularly around the lack of experimentation and curiosity.
- Collaboration received a number of comments in the area of best practice. Collaborations of all kinds were both encouraged and perceived as the necessary next steps.
- Librarians were identified as the most actively supportive group toward OA monographs.

Because these concerns were not specific to one country but many countries across the European continent and wider, the survey only reiterated how important it was to perceive the development of the OA monograph as requiring collective action that crosses national and geographical boundaries (Stone, 2018).

This brings us back to the issue of distribution and discovery of OA monograph content. Hosting platforms for OA monographs—including OAPEN and JSTOR, among others—have been around for years, and studies already exist that that have examined their impact. In order to better grasp the impact of OA monographs once they are made freely available online, we must measure their performance on hosting platforms and zero in on the factors that may or may not

contribute to how often they are used. We also must define the term 'usage,' which is usually described as 'accessing the contents of a book.' This, of course, is not the same as reading a book (Snijder, 2019). It is, in fact, very difficult, if not downright impossible to measure whether a monograph has been read in full or merely browsed. But platforms such as OAPEN and JSTOR tell us how many downloads or user interactions have been recorded (more information on this is provided in Chapter 5, which uses JSTOR usage reports to measure the impact of monographs in 167 institutions across Europe). The scholarly community is now past the point of questioning whether OA publishing leads to more usage of monographs. It has reached a point where it needs to face challenges related to the visibility and discovery of content and usage on local (not only global) level, and this largely has to do with continuing to improve the bibliographic metadata (Neylon et al., 2013).

Studies have already settled that making academic books freely available increases the number of pages read online or the number of downloads (Emery et al., 2017). The already-mentioned 2017 Springer Nature report also found that OA books receive an average of 50 percent more downloads than non-OA books; OA books receive 50 percent more citations than non-OA books; and OA books gained ten times more mentions over a three-year period compared to non-OA books (Emery et al., 2017). Previous studies have also examined if the sales of OA books are harmed in any way as a result of the online usage of OA monographs rising, concluding that OA monograph publishing did not stimulate or diminish sales of printed editions (e.g., Snijder, 2010). In 2013, Amsterdam University Press, a long-time and very active player in the OA publishing space, reported that after examining the usage of their OA monographs on the OAPEN platform reported that while online usage of their titles was on the rise, the press found no evidence that OA harms the sales of printed editions (Snijder, 2013).

Previous studies have also examined the 'impact' of scholarly publications backed specifically by library funds (Click, 2019). Their conclusions largely point in the direction of the value and the necessity for institutions' libraries to fund the publishing of their authors' research. Click's 2019 study explored the journal articles published via library OA funds at 16 North American universities and their impact. The studies' findings indicated that research impact was a useful tool for increasing faculty support of OA in general (Click, 2019).

Likewise, the impact of OA monograph publishing has also been studied in the context of open licenses to determine if there is evidence that making scholarly books available under open licenses results in more downloads than making scholarly books available under licenses that only allow for personal use. No evidence was found that the application of open licenses to scholarly books leads to more downloads, therefore to more usage (Snijder, 2015). Snijder has also examined the impact of OA monographs in the context of hosting platforms like OAPEN, user communities, social media, and monograph usage in developing countries. The goal of Snijder's many studies has been to determine the factors affecting usage and the impact of OA in the realm of monograph publishing (Snijder, 2019). He has also come to conclusions that book-related factors—such as the language and the scholarly field—affect usage, as does "the level of trust" in the content being offer. Language and the scholarly field are not surprising factors, but the level of trust may be. This means that making a scholarly book available online does not automatically mean that the book will be highly used. It matters where the user finds (or discovers) the book. Most users rely on some kind of a filtering mechanism "to separate the wheat from the chaff" (Snijder, 2019), so the issues of trust and quality are closely connected.

To recapitulate, the level of usage of OA monographs is primarily determined by language (English being dominant, of course), subject (academic discipline), infrastructure (hosting platforms), and trust. Users assume the content available through trusted sources to be of higher quality. The factors that do not seem as important in contributing to the usage of OA monographs are open licenses (how OA monographs are 'protected') and simultaneous availability of print counterparts (Snijder, 2019).

The argument for crowdfunding

The crowdfunding model for OA pops up in literature as a possible viable alternative to APC and BPC models for a good reason. Its main principle is to invite institutions to join forces for the global benefit of open science, authors, and their publishers At its core, it is a win-win proposition that many libraries worldwide have embraced since its advent ten years ago. Before delving deeper into the traits and complexities of this business model, it helps to first define the very notion of 'crowdfunding' and apply it to OA.

A good definition of crowdfunding in the context of libraries was given by Bushong: Crowdfunding can be described as creatively presenting a case for funding to like-minded individuals ready and willing to support a topic. In this sense, libraries join forces to fund content because they have similar beliefs regarding how it should be published and available. However, crowdfunding as a development vehicle for libraries is still in its early stages as a research topic (Bushong, 2018), which means that crowdfunding as a way to support OA is also in its early stages. Likewise, the idea of crowdfunding in libraries has often been explored in relation to fundraising activities by libraries themselves to support their initiatives (Riley, 2016; Bushong, 2018) but less in the context of libraries *giving their own funds* to other parties to support open science and open research. In this sense, the roles shift, and librarians are no longer placed in the position of *receiving* for a cause but also giving for a *greater* cause.

Although the term itself did not enter the Oxford English Dictionary until 2015 (Tondi, 2015), crowdfunding has permeated a wide variety of fields. The most well-known crowdfunding platform is Kickstarter, which launched in 2009 and has 19 million users worldwide who have to date pledged some 5.7 billion US dollars, and successfully funded some 200,000 creative projects across different fields, including a number of successful book projects (Kickstarter, 2021). The reason why there has been a strong argument for the trade publishing industry to engage in crowdfunding is the simple logic behind wanting to enable as much readers' interest and engagement as possible, while enabling publishers to test new waters (Tondi, 2017). Thus, before crowdfunding found its way into the scholarly world as an alternative way to 'fund' the publishing of OA monographs, it had already existed in other forms of publishing as a means of quantifying demand (Tondi, 2017).

Crowdfunding comes in several basic forms: equity-based, lending-based, reward-based, and donation-based crowdfunding (Butticè et al., 2018). In equity-based funding, also known as 'crowdinvesting,' crowds invest in a company in exchange for a small share of the business. In lending-based crowdfunding, also known as 'crowdlending,' fundraises borrow money from the crowd in the form of loans at the cost of an interest rate. In reward-based crowdfunding, funders crowdfund campaigns in exchange for a product or gift. Finally, in donation-based funding, donors contribute to support a cause with no expected remuneration. When libraries join forces to 'crowdfund' the publishing of OA monographs, we can say that they participate in reward-

based crowdfunding because they expect that their participation will lead to scholarly books being published OA. Although some libraries also call participation in crowdfunding in OA initiatives 'donations,' it is not exactly an accurate description as donations imply nothing is expected in return. On the other hand, libraries that contribute funds are not guaranteed the number of proposed titles will all be published OA but that this will be determined based on how much money is received from libraries. In other words, the more libraries participate, the more books can be funded and published OA. Perhaps the most accurate to way to describe crowdfunding OA is to call it a mix of reward-based and donation-based funding, as it entails an expectation, but no outcome is guaranteed.

* * *

The key attribute of the crowdfunding or cooperative OA funding model for monographs such as KU is that it only works if libraries are willing to support it. Libraries must be willing to take a 'cooperative' rather than 'competitive' approach to OA publishing and set aside their institutions' funds for the benefit of 'all' institutions worldwide. This model puts the power in the hands of librarians to drive the future of OA monograph publishing, giving them the influence and the responsibility they did not enjoy in traditional scholarly communications. Because the model relies on libraries' active participation (rather than mere moral support), its sustainability rests on what libraries—not publishers—do and don't do. While some efforts exist around crowdfunding for scholars—mostly focused on their research projects of a small scale (Adema, 2011), donations from individuals cannot be viable or sustainable solution for OA monograph publishing the way they have been for commercial authors via massive crowdfunding campaigns such as those offered by Kickstarter (Tondi, 2017).

However, the idea of building a *community* is a viable solution for the scholarly community and crowdfunding initiatives are centered on building a strong sense of community whose members share similar interests and engage in similar activities. The academic world already has a very strong communal background in the form of 'formal and informal' ties between publishers, authors, and libraries (Adema, 2011). Therefore, it is indeed the institutions

that must stand behind such endeavors. This includes libraries and the universities they support, who are expected to take the lead (Reinsfelder, 2018).

As OA models began to multiply and become more complex, their definitions began to blur, and the so-called hybrid models began to pop up. This is why it's become more challenging to identify which initiatives should be defined as 'crowdfunding' initiatives vs. 'library-led' initiatives whose basic premise is crowdfunding. In the case of KU—whose OA monographs are the focus of the quantitative part of this research—the terms 'crowdfunding' and 'library consortium' are synonymous because the model aims to create a sustainable route to publishing OA monographs through the creation of a global consortium of libraries (Ferwerda, 2014). These libraries 'collaborate' by using existing acquisitions budgets to 'unlatch' monographs. Thus, these new 'coalitions' of libraries with the common goal to 'unlatch' monographs engage in crowdfunding.

The fact that far less funding is available for book publishing than journal publishing should not be overlooked, as it is the key difference between what models will be most sustainable for OA books vs. OA journals. Authors paying to publish their work is contested in the world of HSS even more so than in the world of STEM disciplines (Adema, 2010). After all, far less funding is available to HSS scholars. And since every topic of sustainability always begins with how much funding is available to libraries to contribute with, successful crowdfunding campaigns do not only rest on libraries wanting to participate but on libraries having sufficient funds to participate. Their options are not many in this regard: they participate because they have the necessary funds, they do not participate because they don't, or they are able to re-purpose existing budgets to some extent to accommodate the financing of OA monographs.

The idea of re-purposing library budgets to finance OA monographs has emerged as a relevant topic, supported especially by those who want to eliminate APCs for OA journals. A good example of a consortia-led model for OA journals is the Open Library of Humanities (OLH, NA), which has had its fair share of critics. Not all have been in favor of re-purposing library budgets to fund OA monographs via crowdfunding, as they see real obstacles in this approach that may backfire. One of the central questions that must be asked, the argument persists, has to do with the types of books being financed. Otherwise, libraries may end up

funding the production of monographs that are not relevant to their collections. Re-purposing journal subscriptions is easier to model because it is established that the library wants long-term access to a particular title. Contrarily, libraries only know what book they want to buy after the book has been published and after a library patron has requested it (Farrell, 2019). This is why demand-driven acquisitions (or patron-driven acquisitions) has been a popular library purchasing strategy for monographs (Jubb, 2017). It takes the guessing out of a complex game for librarians, who already have enough OA-related business to keep up with. This calls into question the very reasons libraries would support OA monographs and whether it's ever justified to merely support them in principle and with limited budgets. For this reason, those who oppose this approach have urged libraries to not lose sight of the 'real' issues, reminding other players to be realistic about how libraries buy monographs and what the repercussions of investing in the books not relevant for library patrons could be (Farrell, 2019).

Assuming libraries do have the funds to allocate for monographs, long-term sustainability of the crowdfunding OA monograph model depends on the participation of libraries on an annual basis (as is the case with KU), but libraries are not required to participate continuously; instead, they have the opportunity to decide when and to what extent they want to allocate funds for global projects of this kind each year. This calls into question the faith of the publishers in the process because their business then depends exclusively on donations from institutions on an annual basis, which may vary from year to year. On the one hand, crowdfunding models provide publishers with new opportunities for OA publishing (Gatti & Mierowsky, 2016). On the other, they create potential complications because crowdfunding puts publishers in a position to be reliant on library contributions year after year. Again, their sustainability depends on what libraries do far more than what publishers or authors do.

If the expected contribution from libraries is not realized, publishers are not able to publish OA titles as planned and their OA business may be jeopardized; they also leave authors unsatisfied. The crowdfunding model can therefore only be sustainable if libraries continuously allocate funding to support it (Bulock, 2018), and if their main motive is to join forces (rather than to compete with each other) for the benefit of global science (Eve, *All That Glisters*, 2014). Therefore, from the publisher's perspective, the crowdfunding model is, in fact, not only sustainable if libraries participate but also if publishers continuously contribute quality content,

as this will be a sure way to encourage libraries to invest in OA long term (Rittman, 2018). In summary, if libraries do not participate, the crowdfunding approach falters, but so does the publishers' belief in it. Likewise, it is well known that monograph readership is not large by any definition. Even if publishers invest in publishing academic books, and they continue supplying the content, the question will linger: Who will read monographs? And is it worth investing in OA publishing only because scholars and publishers make strong arguments about the importance of long-form scholarship, even if it is read or used by a very small group of experts?

* * *

The word 'sustainability' permeates scholarly literature on OA and OA business models. It also has permeated discussions at conferences in recent years. Just about everyone is questioning not "are we testing enough" but "what is proving to be sustainable long-term." Still, there is not one uniform explanation or consensus on what sustainability entails in the context of preserving the longevity of scholarly books. Their sustainability, in fact, depends on the specific context in which a business model is considered viable (Adema & Ferwerda, 2009). This is not to say the word 'sustainability' is attached to the word OA. It has always been present in academic publishing throughout its development. Every new business model carries the potential to be sustainable or to fail. Some have rightfully questioned if the traditional print model has ever been self-sustaining and if there has been substantial evidence that HSS monograph publishing has ever been (self-) sustaining and not relying on some form of additional funding to persevere it (Greco, 2008). Subsidies and institutional and governmental funding have always been (a large) part of HSS book publishing and will likely also remain part of OA business models (Adema, 2010).

Because the current model for book publishing is under pressure and will remain under pressure, more and more publishers and institutions are experimenting with OA models not only because they believe in the principles of OA but because they must sustain their livelihood. The OA monograph could, in fact, be the only way to sustain the scholarly monograph, and this, as Michael Jensen put it in his 2009 speech at the Association of American University Presses Annual Meeting in Philadelphia, this is "an inconvenient truth" for scholarly publishers. They need to break the chains of tradition because a new environmentally-friendly and economically

efficient born-digital OA model is here to stay whether they are ready or not. The point here is to remember that while we focus on discussing the sustainability of the library crowdfunding model for OA monographs, we are also discussing the sustainability of the monograph in general.

In order to fully grasp what makes any business model sustainable, the model needs to be tested and studied over time. Many studies have encouraged librarians and the scholarly community to step outside their comfort zones and continue exploring a variety of OA business models (JISC, 2014). And many questions have been asked along the way: What exactly makes a model worth investing in? What helps to keep it going? What key factors seem to have the most significance and help us predict future outcomes? What are the key obstacles and how may they be overcome? When it comes to the crowdfunding OA monograph model, which has had time to mature since the first pilots took place about a decade ago (KU and UnGlueIt, for example, both piloted in 2012/2013), sustainability greatly depends on several factors, including, among others, libraries' funding, libraries' participation, publishers' participation, authors' understanding of the benefits of publishing OA, and overall usage (the existence of an audience for monographs). One can also argue that the very existence of crowdfunding initiatives solves one problem while creating another, as it amplifies the 'free rider' problem. Librarians have expressed concern over the so-called *freeloading* phenomenon—some institutions not participating in such crowdfunding initiatives in the hopes that the participation of others will result in publications being OA and available for all to use (Grabowsky, 2015).

Still, crowdfunding initiatives seem to have endured the test of time, at least in the context of the past eight years. Initiatives like KU have grown larger, not smaller, and more and more OA monographs are being published OA. Just a few years ago, some experts predicted that the KU model—considered one of the more innovative approaches to funding OA monographs— will prove viable and sustainable over time (Leach-Murray, 2017). The scholarly literature continues to encourage librarians to participate in crowdfunding so that the funds of many could be used to open resources for all. That said, librarians have also been cautioned to make sensible decisions about which crowdfunding opportunities are realistic in their own unique situation (Grabowsky, 2015). In the end, as global as the OA movement and its principles are, there needs to be some 'impact' on a local level for librarians to truly awaken to the importance of using government funds to enable OA monograph publishing.

The next frontier

All sides of the ecosystem of scholarly publishing have been vocal about their views, concerns, and challenges as they navigate the landscape of OA monograph publishing, which is proving to be radically different from the landscape of journal publishing. A whole new set of concerns has to be addressed as the monograph resists the standards put in place for journals. It is, put simply, a much more elaborate format, with much more at stake for all involved. The authors of monographs, while slow to warm up to the idea of publishing long-form scholarship in digital format, are slowly opening up to new possibilities as they face the world in which they must question the associated cost, the fairness of open licenses, the quality of the services rendered by OA publishers and, lastly, if the prestige and reputation they've enjoyed by being associated with established publishers—which also ensured their tenure and career advancement—will hold the same meaning in a new world of OA monographs. Publishers of monographs find themselves facing similar concerns as authors, but even more complex, as they also have to consider how to recover the significant costs associated with producing and publishing high-quality monographs, how to incorporate new systems into existing workflows, how to protect their bottom lines while embracing innovation, and how to remain relevant in a fast-moving field that has seen the emergence of new players that may threaten their viability.

Libraries are, as usually is the case, caught in the middle, finding themselves negotiating with publishers as they have for decades, being mindful of the practices that took a long time to develop and get to the point they are today while also protecting the interests of scholars and researchers in their communities. Their concerns stretch beyond ensuring OA content remains of the highest quality, that it is integrated into publishing workflows, licensed fairly, and that the integrity of the scholarship is never called into question to also include: dealing with ever-shrinking budgets, trying to keep up with the steep cost of subscription services and databases, figuring out how to creatively re-purpose funding to not overlook OA monographs, educate faculty and users of the complexities but also the benefits of OA publishing, participate in endeavors that help make OA content more discoverable by investing in and supporting OA infrastructure (internal and external), and collaborate with a range of new and existing players to test new business waters and figure out their sustainability for all: not just for the sake of the authors and the publishers who both invest significant amount of time and resources into writing,

producing, and publishing monographs but also for the sake of libraries and reaffirming their own roles and identities in the process. Put simply, just as they have always spent money on traditionally published content, they now must find ways to spend money on OA content, first with journals and, as of late, with monographs.

As shown, many questions arise when considering business models for OA monographs, and most of them relate to funding (who will pay and how?) and sustainability (what specific traits of each model will contribute to it being around years from now?). As Cockerill argues, sustainability is not synonymous with profitability, and declining profits do not necessarily equal unsustainable business models. Further, he also argues that scholarly publishing models have always depended on public funding to sustain them, even before OA. In this sense, then, a move to OA may simply be a re-alignment of public funding (Cockerill, 2006). The challenge, of course, is figuring out how to re-align funds, since universities cannot afford to pay for both costly subscriptions and OA monographs at the same time (Friend, 2011). In fact, the issues of funding and sustainability apply to publishers (those who produce the content) as much as they apply to institutions (those who purchase or fund the publication of content), as both sides grapple with how best to allocate funds, while serving the needs of their constituents. Sustaining business models has always been the publishers' priority, and business models can only be sustained through experimentation and exploring new options and alternatives (Rittman, 2018). Now that we have substantial evidence that print sales are not jeopardized by the existence of OA publications (Snijder, 2010; Snijder, 2013), the publishing industry is now more comfortable exploring new opportunities. The crowdfunding model for OA monographs has been at the center of experimentation, as large-scale global OA crowdfunding initiatives like KU, among others, pave the way for new possibilities.

Although the impact of libraries on the future of OA monograph publishing and their role as one of the driving factors that will determine its success is sufficiently present in literature (Collins & Stone, 2014), as is the investigation of the impact of OA monographs—particularly in the context of downloads, citations, and mentions—there does not appear to be significant research devoted specifically to the impact of OA monographs published through global crowdfunding business models—those in which libraries join forces to crowdfund the OA publishing of a wide variety of monographs, both brand new (born OA) and being flipped to OA

after being previously published in print. While the term "sustainability" creeps its way into many examinations on the impact of OA monographs, there does not appear to be research available on the sustainability of this particular model, specifically in the context of the type of institutions that support it and librarians' perceptions of this model and their main motives for participating or not participating in such initiatives.

But the term that is used even more than 'sustainability' in scholarly literature that deals with OA monographs and OA publishing is 'collaboration.' Librarians, in particular, are often encouraged to 'collaborate' with scholars, publishers, various entities belonging to their institutions, or other institutions in their countries and internationally in order to help advance the publishing of OA monographs. The term 'collaboration' has also been used to describe various business models being tested to publish OA. In fact, most of those models involve some type of collaboration on the part of those who produce content as well as those who fund it. This study, then, uses the term to describe the crowdfunding initiatives that invite libraries to collaborate for the purposes of funding the publishing of OA monographs and share the cost for the benefit of global science. Now that they have had time to mature and show they have staying power, the time is ripe to investigate factors that contribute to their sustainability.

The question arises: What are the reasons this particular model for OA monographs seems to be enduring the test of time and how does the scholarly community ensure that the model continues to thrive well into the future? Many factors have been discussed and studied and most have had to do with the impact of OA monographs in the context of monograph usage on publisher (rather than institution) level (e.g., the OAPEN-UK study (Collins & Milloy, 2016)) and in the context of downloads, citations, and mentions (Emery et al., 2017). Previous studies already discussed have settled that monographs published OA receive more usage, citations, and mentions than those published traditionally and that there is no adverse effect of OA publishing on publishers' bottom lines (Snijder, 2013). Given the lukewarm reception OA monographs received when they first entered the OA narrative, it is understandable—and it was to be expected—that the early studies would focus on the impact of OA monographs in relation to publishers' businesses, the quality of OA monographs in relation to traditional monographs, and how they may impact the processes that determine scholars' reputation. What is needed next is more investigation into how OA monographs will continue to be published and funded in the

future. The crowdfunding model used by a variety of organizations—including KU—is proving to work and although still considered innovative and alternative to existing publishing models, it has been around long enough to give clues into how it is being adopted and by whom. The time is ripe to investigate why it works and what it will take to sustain it long-term so that a larger population of scholars, publishers, librarians and other stakeholders adopt it, promote it, and contribute actively to its sustainability. This will result in more academic HSS literature being available OA without restriction to users and scholars worldwide.

CHAPTER 3

THEORETICAL FRAMEWORK

A thorough overview of a wide range of theoretical starting points and frameworks applied in OA research is provided by Pinfield et al. (2021). In a comprehensive analysis and systematic review of the available literature, the authors identified a number of theories that shape the research landscape of OA and are most commonly used in the research of OA ideas and models. Some of these theories do not originate in library and information studies but are often applied in those studies, while others do. The theories include the following: Innovation Diffusion Theory, Solow-Swan Model, Unified Theory of Acceptance and Use of Technology (UTAUT), Scholarly communication life-cycle model, Disruptive Innovation, Game Theory, Critical Theory, Actor Network Theory, Social Exchange Theory, Socio-Technical Interaction Network, Theory of Reasoned Action, Theory of Planned Behavior, Academic Tribes, and SECI Model (Pinfield et al., 2021).

This study will start from the elements of the Innovation Diffusion Theory, since OA is still considered an innovation in scholarly communications and the library crowdfunding business model for OA monographs, in particular, represents innovation in the way the publishing of OA monographs is funded. Several of the above-mentioned theories could also be applied to the study of OA monograph publishing and funding and serve as solid theoretical starting pints for understanding the attitudes and motivations behind what makes OA-related practices more or less successful—including Disruptive Innovation Theory (an innovation creates a new market and value network, and eventually disrupting existing market); Actor Network Theory (everything exists in constantly shifting networks of relationships); Theory of Planned Behavior (attitude toward behavior, subjective norms and perceived behavioral control together shape an individual's intensions and behaviors); and Academic Tribes (knowledge structures of disciplines determine the behavior and values of academics)—it is precisely the theory of diffusion of innovations that offers strong starting points for evaluating and predicting the effect of such a model as it allows us to clearly follow the path of how a new idea, an

innovation, enters a rather set-in-its-ways field (in this case, the field of scholarly communications and academic publishing) and becomes adopted over time. The study, therefore, uses the innovation diffusion theory as the basis for understanding the main factors influencing the attitudes and behaviors of the key actors (or players) comprising the market of scholarly communications.

Innovation Diffusion Theory

Considered one of oldest social science theories, Innovation Diffusion Theory (IDT) was developed by Everett M. Rogers in 1962 with the goal to explain how new ideas and innovation spread over time, gain momentum and diffuse through a specific population or social system (Rogers, 1995). Adoption means that a person or a group of people does something differently than they had done in the past (Leif, 2019). In the case of academic publishing, this refers to embracing new business models that support legally 'opening' licensed content for the purposes of spreading knowledge and making it accessible worldwide, thus bridging digital and other divides without endangering content creators and their right to be fairly compensated for their work. Adoption can only be successful, of course, if the new idea is perceived as innovative and better than status quo rather than threatening and disorderly to the point where it disrupts systems that are highly functional, productive, and profitable for various players. IDT is very useful in the context of OA monograph publishing through crowdfunding as it provides logical guidance as to who has been adopting it the most, at what rate, and how, so that we may be better positioned to identify the factors contributing to the longevity of this idea or innovation. Put differently, once we clearly identify the key players in the so-called Diffusion of Innovation Curve (Figure 1), we can then closely examine their behaviors and the factors behind their motivations to drive, support, postpone, or reject innovation.

Rogers describes the 'innovation-decision process,' which explains how a person or groups of people accept or reject an innovation. The ultimate goal is always to reduce the uncertainty about an innovation and make adopters more comfortable with it. It includes five steps that may or may not occur consequently: Knowledge; Persuasion; Decision; Implementation; and Confirmation (Leif, 2019). These 'steps' are described below, with the

parts in parentheses explaining each step in relation to OA monograph publishing and the library crowdfunding business model:

- Step 1: Knowledge: A person (or a group of persons) becomes aware of the new idea and begins to learn about it (Scholars, publishers, and/or librarians learn about OA monograph publishing).
  Step 2: Persuasion: The person or the group of people develops an attitude towards an innovation (Through discussions, scholars, publishers, and librarians begin to realize that applying the principles of OA to monographs has significant benefits for the scholarly community).
- Step 3: Decision: The person or the group of people who is aware of an innovation and has formed an attitude towards it decides to adopt the innovation (Scholars, publishers, and librarians decide to join forces to 'test' the library crowdfunding model for OA monographs by launching a pilot).
- Step 4: Implementation: The person or the group of people starts using the innovation and learning about it, dealing with potential obstacles, and, along the way, helps to reduce the uncertainty regarding the innovation (The pilot is successful, and a larger scholarly community involving even more scholars, publishers, and libraries is invited to participate in the initiative).
- Step 5: Confirmation: After implementing the innovation, the person or the group of people continues to collect information that reinforces their decision. If this leads to conflicting information, the adoption may be reversed (The new business model is tested repeatedly, and its progress is monitored to determine its effectiveness and staying power, resulting in a lot of analysis and publication of viewpoints).

Based on his findings, Rogers uses a measure of "innovativeness" to establish types of adopters (individuals who embrace/implement innovation at various stages). Using the average time it takes a person or organization to adopt an innovation, Rogers developed five types of adopters that make up the Diffusion of Innovation Curve (Figure 1). As Rogers notes, these are 'ideal types' and a variety of adopters that may be observed over time, but these five are the most common and the most useful when considering the process of diffusion of innovation (Rogers,

1994; Leif, 2019). These five types are described below, with the parts in parentheses explaining each type in relation to OA monograph publishing and the acceptance/adoption of the library crowdfunding model by the scholarly community:

Type 1: Innovators (2.5 percent): Innovators play a major (perhaps the most important) role in the diffusion of innovations. Innovators are interested in new ideas. They have the affinity for originality, uncertainty, and risk. They are less connected to local peer networks and are far more interested in maintaining more cosmopolite relationships with other innovators. These relationships with other innovators allow them to generate new ideas. *[The concept of crowdfunding did not originate in the library field. Instead, it originated in the world of startups and only goes back about 20 years. The first recorded use of the term "crowdfunding" was in August 2006, by entrepreneur Michael Sullivan (Startups.com, 2018); the advent of OA publishing, in general, could certainly be described as 'innovation' in scholarly publishing and, therefore, the scholars who were the original advocates of OA in publishing can be described as the original innovators.]*

Type 2: Early Adopters (13.5 percent): Unlike innovators, who are often recognized and valued for their 'maverick' qualities, early adopters are less driven by breaking new ground but keep up with emerging trends. As such, they are very connected to their peers and their local communities. They serve as role models for other members of a social system and are the first people innovators test their idea with once stepping outside their circles. When they have adopted an innovation, early adopters communicate their evaluation of it to their peers, who use this evaluation to reduce their own uncertainty about an innovation. Early adopters are essential in helping innovation reach the critical mass necessary for it become adopted widely. *[The KU initiative, founded and launched by a social entrepreneur in 2012/2012, is rooted in the idea that the innovative principles of crowdfunding can be applied to the publishing of OA monographs and libraries for the benefit of all actors in the scholarly community. In other words, KU is an early adopter of the idea of crowdfunding, which it applied to the funding of OA monographs in scholarly communications.]*

Type 3: Early Majority (34 percent): This groups includes the adopters who embrace new ideas just before the average member of a group or society does. While they are not the 'leaders' in the adoption process and, their interconnectedness in the social system makes them

an important link in the diffusion of innovations and the tipping point in the process (as illustrated in Figure 1) is achieved after this group has fully embraced innovation. *[The publishers and scholars that participated in the KU pilot, who were the very first to provide the books that made up KU's original collection of monographs to be published OA, and the libraries that agreed to test the new approach and fund this collection, were the early majority that set the 'library crowdfunding' model for OA monographs in motion. The libraries that began to participate very early in the process, immediately following the pilot, are also be considered the early majority.]*

Type 4: Late Majority (34 percent): This group adopts innovation after the average member has already adopted it. The main reasons they often agree to adopt new ideas are peer pressure and economic necessity. The late majority is often skeptical about new ideas, and they need to be assured that their investment is worth it. *[The publishers and scholars that joined the KU initiative only after the pilot proved successful, as well as the second and third wave of libraries that began to actively participate in the crowdfunding campaign after the libraries that participated in the pilot offered positive feedback, are 'late' adopters. Many of the institutions examined in the quantitative analysis of this research belong in this group.]*

Type 5: Laggards (16 percent): Laggards rely on the past to influence their present decisions and form their future outlooks. They prefer to be in the company of like-minded peers who value tradition over innovation and who oppose adjusting their habits, behaviors, and long-held beliefs. Before they can even consider adopting an innovation, they need to be sure it will actually work from every aspect. Laggards may also resist innovation not only because of their loyalty to tradition but also due to limited resources and financial means (an important limitation of Rogers' theory). *[Publishers resistant to producing and publishing OA monographs or testing various business models to see how best to make them available as well as libraries that do not participate in OA initiatives belong in this group, as do scholars who prefer to publish their monographs via traditional publishing channels and continue to question if the new frontier of OA publishing threatens to disrupt the highly effective reputation and reward' system that has shaped the scholarly world for a very long time.]*

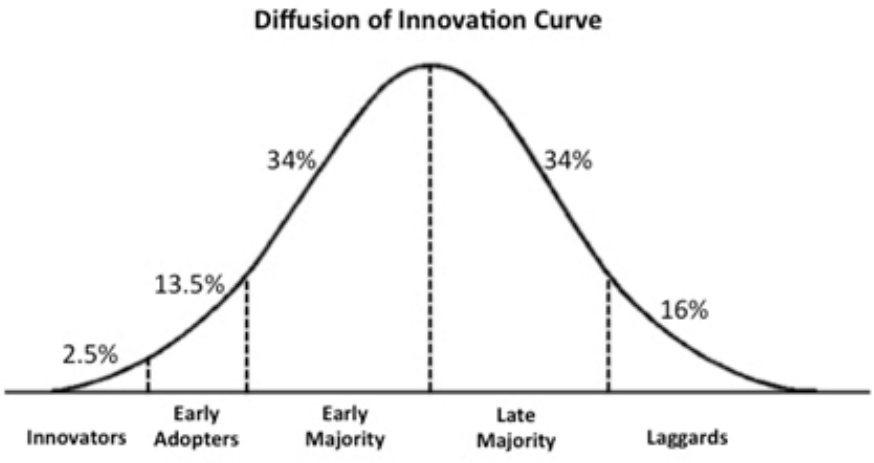


Figure 1: Diffusion of Innovation Curve (Rogers, 1962)

Source: ResearchGate: https://www.researchgate.net/figure/The-Diffusion-of-Innovation-Curve-Rogers- 1962_fig2_322337558

Other scholars have previously applied IDT in their considerations of the impact of OA in academia, including, for example, Hampson, who examined Canadian academic research libraries' adoption of OA funds and found that OA funds were becoming common but still not a standard service in Canadian libraries (Hampson, 2014). Pinfield and Middleton analyzed scholars' adoption of a faculty publication fund for open access APCs at the University of Nottingham in order to gain an understanding of how OA journal publishing was adopted, particularly regarding gold OA (Pinfield & Middleton, 2016).

To date, no available study has examined the factors contributing to the sustainability of the library crowdfunding model for OA scholarly books by using this theory. Given IDT's focus on how new ideas are adopted over time through the lens of five specific 'types' of adopters (whose actions are required at different stages in the process to ensure the idea survives and thrives), it is fitting to approach the concept of OA monograph publishing via library crowdfunding in the context of IDT's basic tenets and the characteristics of its key adopter 'types.' This is the starting point for gaining a deeper understanding of their actions, behaviors, motives, and attitudes.

Changing behaviors and attitudes

Any time a new idea is introduced into a traditional value system—particularly ideas that propose new values to be applied when measuring or assessing certain goods—changes are bound to take place. Major changes. For this reason, changing the traditional system of scholarly publishing has been a collective problem affecting many (Neylon et al., 2019). For change to be sustained, it requires institutions (universities, university libraries, national libraries) to support new approaches to OA through concrete action (Neylon et al., 2019). But changing the behaviors and attitudes of their communities of scholars and researchers is no small task, since they are deeply rooted in traditional norms of academia's 'reputation' economy. Asking them to step outside their comfort zones and out of the norms they are used to is simply not in their interest as there is too much at stake (Pinfield et al., 2021), particularly in the realm of HSS research and HSS publishing, which heavily relies on monographic, long-form scholarship. As studies have shown (Chapter 2), HSS scholars, in particular, have remained slow to adopt OA monographs because the very notion of OA monograph publishing started to 'impinge on their consciousness' (Pinfield et al., 2021).

Despite the fierce resistance from the majority of scholars, there were those who were 'early adopters' of OA and who fully embraced—even championed—OA monograph publishing, just as their peers embraced and championed OA journal publishing before them. After all, OA was in its beginnings a "grass roots" movement among scholars—a bottom-up, community-driven model of open journals and repositories (Schöpfel, 2015) and it was the scholars unhappy with how their scholarship was being published and disseminated who were the original advocates and defenders of OA (Bailey, 2007). It wasn't publishers or librarians.

Although there have been valid arguments that the key driving forces of OA publishing the past few years are not community-driven needs anymore (which was the case at the onset) but various commercial, institutional, and political interests (Schöpfel, 2015), the emergence and persistence of crowdfunding business models for OA, such as KU—which require all sides of the publishing ecosystem to cooperate to mutual benefit—may serve as proof that the community at large remains aware that only by working together can the obstacles and discomforts associated with OA publishing be overcome. After all, if the scholarly community cannot agree on how best to publish OA—particularly OA academic books—it will be difficult to adapt and change

behaviors for the sake of the advancement of knowledge. This is not to say that commercialism has not found its way into the publishing industry, but it is to say that the profits and the non-profits ought to work together to advance OA agendas. Two types of clashes may occur if they don't and have, in fact, occurred at various times (Neylon et al., 2019)

- Responsibility clashes — i.e., disagreements over who has the responsibility to decide how new rules and new values are adopted. In the context of OA monograph publishing, disputes inevitably arise as to who should have the most proactive role and how. Should this rest on all players or mostly on some? As mentioned previously, librarians are often called upon to take the driver seat when it comes to funding OA, since they have always been the main purchasers of scholarly content, both journals and books.
- Revenue clashes — i.e., disagreements over how the new business models should be established and implemented. In the context of OA monograph publishing, disputes inevitably arise if publishers see the potential for loss of revenue or viability. Different publishers measure risk differently, so if one model makes sense for one side, it may not make sense for another.

While these two types of 'clashes' and tensions have persisted among various 'adopters' of innovation, the awareness that the way to move forward through collaboration has also emerged. Collaboration is seen as the requirement in the quest to solve the challenges related to OA funding and infrastructure. As noted in the Knowledge Exchange Report, which highlighted key findings from a two-day event on the OA monograph landscape in Brussels in November 2018, "there remains a lack of consistency at a European level for the support of OA books, with respect for funding, recognition, infrastructure, and awareness" (Adema, 2019). The goal of the event was to emphasize the importance of monographs as an OA format and to encourage further collaboration and the sharing of best practices which involved librarians, scholars, publishers, and various funders and facilitators of OA. One of the key recommendations for authors and universities included promoting the importance of monographs as a format for open HSS scholarship in their communities, while for libraries the key recommendation was to take a more active role in *financing* OA monographs (Adema, 2019).

As the middlemen between scholars and publishers, librarians are uniquely positioned to balance the needs of both sides (those that create and those that distribute what is created) as both sides will need to embrace innovation and adjust not only their viewpoints but also their behaviors. As such, libraries, although not the original innovators of OA or the concept of crowdfunding, have been among its early adaptors as well as the early majority. In fact, no group in the scholarly communication ecosystem can be placed in just one category. Scholars, publishers, and libraries belong in almost all 'adopter' groups—from innovators and early adopters to late majority and laggards. This is the aim of the study: to determine what has helped sustain the library crowdfunding model thus far by examining the actions of those that played leading roles and what has prevented others from taking part in crowdfunding initiatives. In other words, the concept of sustainability is closely tied to the actions of early adopters and the early majority.

That said, IDT is not without its limitations (MacVaugh, 2010) and it's important to acknowledge that the theory, although highly reliable, does not take into account an individual's or group's resources, social support, or financial means to adopt a new idea. In the case of libraries wanting to support the publishing o OA monographs, the reason for adopting or not adopting a new model is the cost associated with innovation. As the results of the librarian survey analysis reveal (Chapter 5; 5.3), cost and budgets are still perceived as the biggest obstacle for libraries and the main reason they do not participate in crowdfunding campaigns, even when they would otherwise want to. For them to cost of 'switching' is still too high (MacVaugh, 2010). This explains, for example, why libraries in emerging markets (e.g., Eastern Europe, Latin America) have been slow to adopt crowdfunding models.

Research questions and hypotheses

In order to fully grasp the sustainability of the library crowdfunding business model for OA monographs, it is important to understand the IDT 'types' (Rogers, 1995) and examine how they have contributed or not contributed to 'diffusing' this particular business model for OA publishing. The study proposes that by examining the 'actions' as well as 'characteristics' of the various types of adopters, including Early Adopters, Early Majority, Late Majority, and

Laggards, in the context of via library crowdfunding, the study's key research questions may be answered:

- Which European institutions see the highest usage of OA monographs funded through KU's crowdfunding model? Are those the institutions that finance it? To what extent?
- What types of institutions support the crowdfunding of OA monographs by actively and regularly (or often) participating each year? What are their attributes, particularly related to their overall reputation, the recognition of their scholars, their size, and loyalty to specific disciplines?
- What are the key motives behind these institutions' participation and support of collaborative/crowdfunding initiatives for OA monographs?
- What factors are contributing to the sustainability of OA monograph publishing via library crowdfunding based on the types of institutions that support the model (usage analytics and institution profiles) and based on librarians' perceptions and viewpoints (librarian survey)?

The hypotheses at the start of the research include the following assumptions:

- The institutions that see the highest usage of OA monographs are generally the institutions that participate in library crowdfunding the most.
- Large, research-intensive universities that rank high in terms of their overall reputation and research output allocate more funding for OA monograph publishing than those that rank lower
- Librarians are most keen on participating in crowdfunding initiatives if they have tangible proof that the content is relevant in their local communities.
- The key factors contributing to the sustainability of OA monograph publishing include, among others: usage, reputation, local impact, and affordability (i.e., the cost of OA monographs).

These assumptions are largely influenced by previous studies and predictions of scholars who have monitored OA and the progress of its many facets over the years (reviewed in Chapter 2). They are also influenced by the belief that although significantly different and not without disparities, OA monograph publishing and OA journal publishing have more in common than

may appear. Therefore, the progress of OA monograph publishing will not be radically different from the progress of OA journal publishing and is likely to face similar issues and challenges.

CHAPTER 4

METHODOLOGY

This research will be conducted as an *instrumental case study* that provides insight into how and why the crowdfunding model for OA monographs is supported (or not supported) by institutions in Europe. The study follows the 'actions' and 'characteristics' of the institutions supporting and/or not supporting the publishing of OA monographs via KU's annual crowdfunding initiative in the period from January 1, 2017, through the end of September 2020 in 167 institutions across Europe, including the countries of Western and Northern Europe that are known to participate in crowdfunding initiatives the most (e.g., UK, Netherlands, Germany, Sweden, Finland, and Norway) and in Eastern Europe where institutions do not or rarely participate in such projects (e.g., Poland, Czech Republic, Slovakia, Hungary, Latvia, Lithuania, Estonia, Serbia), to gain accurate insight into the available analytics that reveals where the most usage takes place and how it corresponds to those institutions' participation or non-participation in crowdfunding. Since the launch of KU pilot in 2013, information on the institutions participating in the annual crowdfunding campaign has been publicly available, as well as details on the funds donated annually by the institution.

The study examines the usage of OA monographs published OA through KU's crowdfunding model from the beginning of the pilot, per institution. By 2021, the KU initiative has published OA over 2000 academic e-books in various fields, particularly in HSS. This research monitors the performance of 663 monographs to establish if and how users have interacted with them in 167 institutions around Europe in the given period. The study relies on the usage reports provided by JSTOR to KU; these reports are generated quarterly and include thousands of titles belonging to other OA collections. This analysis, however, focuses only on the 663 monographs from KU's legacy collection known as KU Select.

Quantitative study

The goal of the quantitative study is to determine which factors may contribute to the sustainability of one particular business model for publishing OA monographs: collaboration through crowdfunding by libraries. As mentioned, while this business model is thoroughly described in a large number of scholarly articles, it has not been studied in depth to determine the key factors that contribute to its sustainability. In order to identify those factors, this quantitative study aims to 'profile' the institutions that regularly participate in crowdfunding by considering the following:

- Which institutions are seeing the highest usage?
- Do institutions seeing the highest show the most financial support for collaborative projects like KU when compared to those that do not support?
- What do the institutions seeing the highest usage have in common?
- What are some of the traits of the institutions seeing the highest usage, particularly in relation to their overall world ranking, research productivity, and reputation?

The study's quantitative analysis is divided into three parts: Part 1 is focused on the usage of OA monographs, with data drawn from the widely used and well known library platform JSTOR, while Part 2 is focused on institution profiles by examining their rankings according to three major world ranking sources. Part 3 is an anonymous librarian survey designed to serve as a supplement to Parts 1 and 2.

As discussed in the studies that have attempted to measure the impact of OA monographs over the past few years (Chapter 2), information about the usage of OA monographs is crucial in order to understand their current relevancy and long-term sustainability. Usage data is not only useful for the authors to be able see if other researchers are discovering their work and applying to further research. It is useful for the publishers to have proof that it is worth it for them to adjust their businesses and operations and incorporate the publishing of OA monographs into their existing workflows. It is also useful to those who fund the publishing of OA monographs, and this, of course, includes libraries. Funding authorities—whoever they may be—are eager to be able to measure and quantify impact (Montgomery, 2013) because everyone wants proof that what is funded is being used.

Insight into the use of OA monographs has previously been provided by the studies that had focused on collecting data from publishers (e.g., OAPEN-UK study), but less attention had been given on examining where the usage of OA monographs takes place. When examining where usage takes place, we are better able to understand which institutions benefit the most in terms of their investments or non-investments. This study relies on the usage reports supplied by JSTOR to KU, which show how users interact with each title per institution, by month, with focus on 'downloads' (when users download actual titles) and 'views' (when users open an OA book but do not download it), both counting as 'interactions.' In 2020 JSTOR changed their metric structure, merging the previous COUNTER 4 metrics "Chapter Views" and "Chapter Downloads," which used to be separate metrics into the COUNTER 5 metric "Total Item Requests," which adds up both chapter views and chapter downloads for each title. For the purposes of this study, usage data for 663 KU monographs (from KU's well-known collection, KU Select), published OA between 2014 and 2020 via KU, and accessed on the JSTOR platform through libraries in 32 European countries and 167 institutions is examined. More specifically, the study examines the 'interactions' (broadly speaking, downloads and views) by people registered at those institutions in the following period: from January 2017 through September 2020.

Part of ITHAKA, a non-profit organization mission to improve access to knowledge and education for people around the world known for several brands, including JSTOR, Artstor, Ithaka S+R, and Portico, JSTOR platform needs no introduction in the world of scholarly communications and librarians. The JSTOR online digital library is used in more than 11,000 schools, universities, and institutions worldwide. The platform provides access to more than 12 million academic articles, peer-reviewed journals, books, monographs, and other documents in 75 scholarly disciplines. Its goal is to partner with libraries, museums, and publishers to 'reduce costs, extend access, and preserve scholarship for the future (JSTOR, 2021). All journal content in JSTOR published prior to 1924 in the United States and prior to 1876 elsewhere is freely available to anyone. JSTOR integrates approximately 100,000 e-books from over 250 scholarly publishers with journals and primary sources, including DRM-free access to e-book chapters. JSTOR's e-book subject collections are diverse, with the following HSS disciplines being the most represented: history, political science, language and literature, religion, philosophy, and sociology. About 6500 titles in the JSTOR collection are OA scholarly e-books from leading

publishers, which libraries can freely access and download, including general users not logged in through their institutions, anywhere in the world (JSTOR, 2021). JSTOR's growing collection of available academic OA monographs also includes the full KU collection of OA monographs (i.e., scholarly books published OA through KU's annual 'pledging,' i.e., crowdfunding initiative)—the focal point of this study. Library administrators at participating institutions may request detailed usage reports from JSTOR directly, which include information about user interactions. JSTOR also shares usage data and metrics with its many partners and publishers, including KU.

Population and content sample

Table 1 shows the country representation percentage, from the smallest representation (e.g., Bulgaria, Iceland, Luxembourg) to the highest (e.g., the Netherlands, Germany, and the UK), while Figure 2 shows the diversity of the countries represented in the study. Although UK institutions make up 22.75 percent of the total of institutions included in the study, Figure 1 clearly shows the diversity of the countries represented, stretching well beyond the borders of the European Union and of Western Europe, where OA monograph publishing has had more time to mature and gain ground.

Table 1: Country representation — percentage

Country	Representation percentage
Bulgaria	0.60%
Iceland	0.60%
Luxembourg	0.60%
Serbia	0.60%
Slovakia	0.60%
Ukraine	0.60%
Croatia	1.20%
Estonia	1.20%
Greece	1.20%
Latvia	1.20%
Lithuania	1.20%
Romania	1.20%
Slovenia	1.20%
Portugal	1.80%

Denmark	2.40%
Hungary	2.40%
Russian Federation	2.40%
Czech Republic	2.99%
Finland	2.99%
Norway	2.99%
Poland	2.99%
Switzerland	2.99%
Austria	3.59%
Belgium	3.59%
Ireland	3.59%
Italy	3.59%
Spain	3.59%
Sweden	3.59%
France	4.79%
Netherlands	6.59%
Germany	8.38%
UK	22.75%

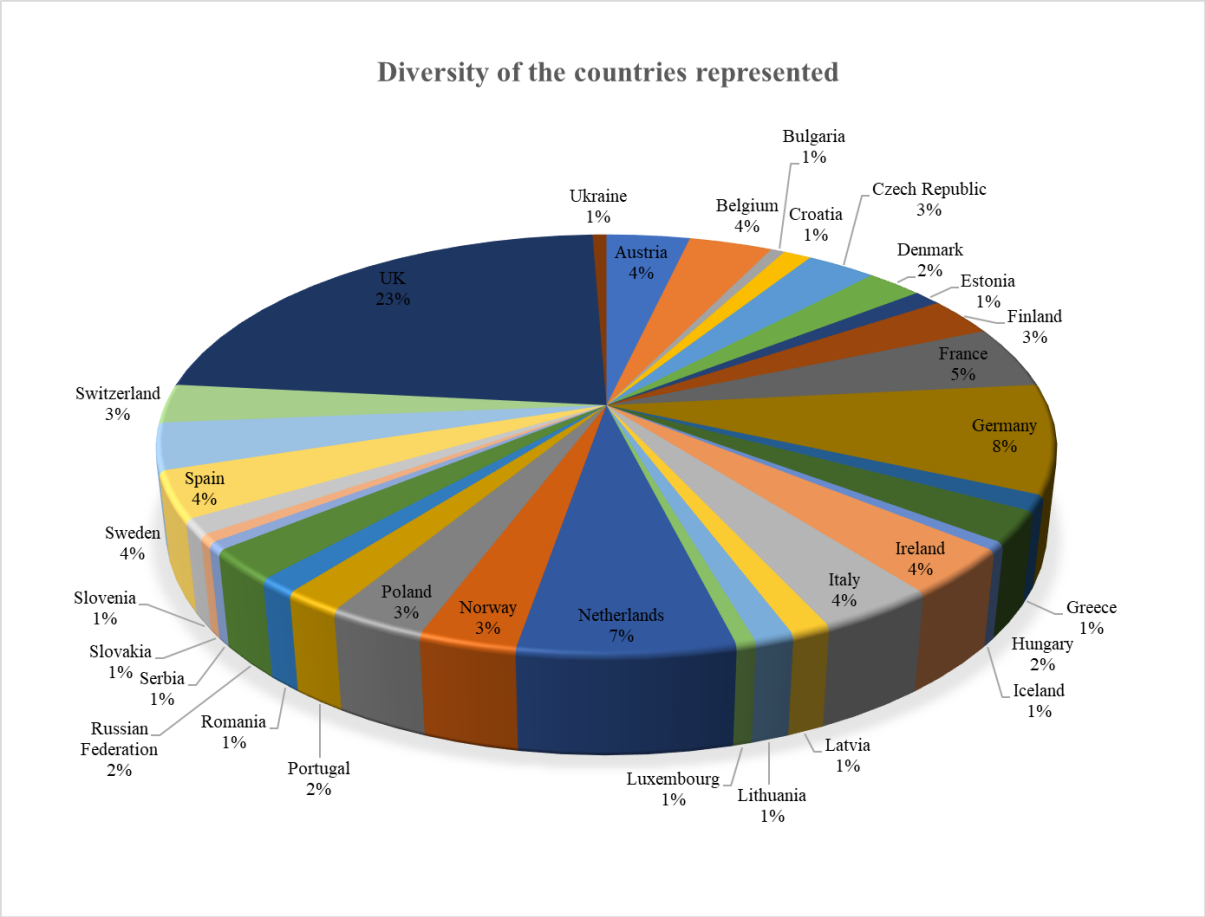


Figure 2: Diversity of the countries represented in the study

KU Select is a multi-disciplinary collection comprising a range of academic e-books, most of which are in the HSS fields (although STEM fields are also represented, but to a much smaller degree). Table 2 lists the categories represented in this study, with Society & Social Sciences and Humanities (history, Archaeology, Philosophy, and Religion) making up more than half of all unique books included (67 percent).

Table 2: Scholarly disciplines represented, including number of unique books per discipline

Scholarly discipline	Unique books per discipline	Percentage
Society & Social Sciences	240	36.20%
Humanities (History, Archaeology, Philosophy, Religion)	206	31.07%
Literature & Literary Studies	99	14.93%
The Arts	40	6.03%
Economics, Finance, Business & Management	22	3.32%
Reference, Information & Interdisciplinary Studies	13	1.96%
Language	11	1.66%
Medicine	9	1.36%
Earth Sciences, Geography, Environment, Planning	6	0.90%
Law	5	0.75%
Technology, Engineering, Agriculture	5	0.75%
Biography & True Stories	4	0.60%
Lifestyle, Sport & Leisure	2	0.30%
Mathematics & Science	1	0.15%

As Figure 3 shows, Literature (15 percent), the Arts (6 percent) and Economics (3 percent) are represented in substantial numbers, while other categories are represented in very low numbers.

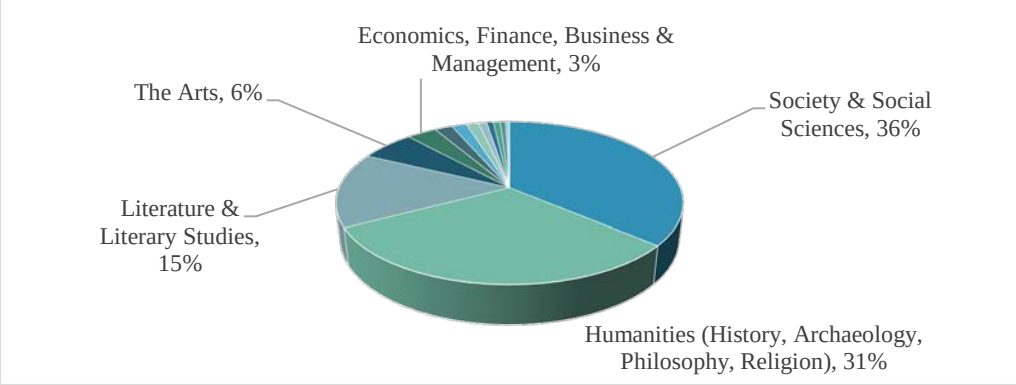


Figure 3: Most represented scholarly disciplines in the KU collection

The research relies on quantitative methods so that the picture of the use of OA e-books and perceptions about the financing of OA e-books and the sustainability of the crowdfunding model is as accurate as possible. This includes publicly available data on the use of OA monographs on the JSTOR platform within specific institutions. The key goal of this research is to answer the following question: Is the greatest growth in the use of OA monographs present in

the institutions that fund the KU OA crowdfunding model the most? The study is supplemented by an anonymous survey in the form of an online questionnaire designed for librarians dealing with OA to determine their attitudes about crowdfunding, its sustainability, the impact of the authors' background on decision making and their willingness to participate in crowdfunding, and various other motives for participating in global crowdfunding projects (e.g., relevance of disciplines, local usage).

Knowledge Unlatched model

In order to fully grasp the JSTOR usage data showing how KU books are used throughout Europe in relation to the institutions that support KU financially, the KU business model needs to be fully explained, particularly how it works, what makes it unique, and how libraries contribute to its success. KU is an organization that facilitates the publishing of OA monographs (and, as of late, journals) and makes them freely available worldwide. KU's mission is to assist in the process of publishing and funding OA books by working directly with publishers (who supply the content for publishing) and libraries and academic institutions (who supply the funds needed to publish the content OA). KU is best known to libraries for its collaborative OA crowdfunding (or 'pledging') campaigns, in which libraries worldwide join forces to co-finance the publishing of OA books. These campaigns start in early May and end in December of each year. What follows is listing of some of the key characteristics of the KU model, as described on KU's website (2021):

- KU is best known for its legacy collection, KU Select, which was first piloted in 2013. It is a multi-disciplinary collection of monographs covering various HSS disciplines, some of which are frontlist (born OA), while others are backlist titles being converted to OA. Libraries can choose to support the full KU Select package each year, or, as of 2020, libraries can now also support individual subject packages (e.g., Anthropology, History, Politics, etc.).
- KU (as the middleman in the process) collects funds from libraries and supporting academic institutions each year and passes them on to publishers so that they may

recover the costs associated with editorial and production investments needed to publishing scholarly content OA.

- Publishers use the funds received from participating institutions to produce and publish content OA, including paying the authors and covering production costs. This way authors do not face APCs (for journals) or BPCs (for books).
- After the pledging cycle closes each year (usually in late November or early December), the 'crowdfunding' results are assessed, and the unlatching process begins soon thereafter. The more funding KU receives from libraries, the more content is published OA.
- All books submitted to KU by publishers must undergo peer review.
- The KU Selection Committee, made up of about 200 librarians affiliated with various institutions around the world, reviews titles submitted in advance by publishers and the Committee then votes for the titles it believes should receive the funding. The titles that receive the most votes by the Committee members become part of KU's legacy collection, KU Select.
- The success of KU's annual initiatives depends on libraries worldwide working together to co-finance the publishing of the chosen titles.
- Once 'unlatched' (published OA), KU titles can be integrated into library catalogs and accessed on various platforms, which allows librarians to promote the content freely to their users. KU titles may be integrated into library systems via several indexing and discovery services, including the most dominant ones: EBSCO Discovery Service, ProQuest/Ex Libris Primo and Summon, and the OCLC.
- KU titles are hosted on JSTOR, OAPEN, Project Muse, and the Open Research Library platforms, where they are available for free access and download, either directly or via integration into library catalogs.
- Since KU launched in 2013, some 630 libraries worldwide have financially supported one or more of KU's OA initiatives, including KU Select.
- On average, each KU book has received 2,200 user interactions to date (KU website, 2021).
- KU invests a great deal in OA infrastructure that helps it keep track of the usage of KU books. Libraries may obtain detailed usage reports for their institutions

from KU at any time, even if they do not participate in its annual campaign. The usage reports that KU shares with institutions are used in this study.

University rankings

Part 2 of the quantitative analysis examines the characteristics of the institutions by taking a closer look at how they score in all three of the world's most established university ranking sources: THE ranking, ARWU ranking, and QS ranking. The importance of university world rankings and their impact has been studied extensively in the context of their accuracy (e.g., Vidal & Ferreira, 2020). It has also been studied in the context of OA journal publishing, but only in regard to how and if the citation impact of research articles published OA contributes to improving an institution's position in university rankings (Baldock, 2016). There are, however, no available studies to date that use university world rankings sources to profile the institutions that support a specific OA model and determine the factors contributing to its sustainability.

The following six indicators and scores are studied by relying on the data supplied by all three sources on their websites: Overall world university ranking; student size; faculty size; research output; citations impact; and international outlook. Each of these three rankings is unique in its own way. When combining the data on all the institutions compiled by all three sources, we arrive at some revelations about the type of institutions that support and do not support the KU model.

THE Times Higher Education — THE has been analyzing data on universities and institutions of higher learning since 2004. It is most known for its THE World University Rankings, widely considered the authoritative list of the best, most sought-after universities. The THE's ranking list include more than 1,500 institutions in 93 countries (THE, 2021). According to the information available on THE's homepage, it is the only rankings source that "judges research-intensive universities across each one of their core missions." THE performance indicators are divided into five areas: Teaching (the overall learning environment); Research (volume of research produced, income, and reputation of research), Citations (the influence of research); International outlook (in relation to research activities, as well as student body and teaching staff); and Industry income ("knowledge transfer"). As explained on the Methodology page, each of these indicators is further broken down into various areas. Together, all of the

indicators and sub-indicators give an institution an overall ranking (Teaching 30 percent; Research 30 percent; Citations 30 percent; International Outlook: 7.5 percent; and Industry Income 2.5 percent).

Institutions are asked to supply school-related data and approve this data for use by THE rankings. If some data is not provided or is missing, THE calculates a "conservative estimate" for any missing or incomplete metric. This way, THE does not "penalize" an institution with a "zero" value for the missing or overlooked data, but it also does not assign a value to it that isn't realistic (THE Methodology, 2021). This study examines the following THE indicators are for the year 2020:

- Overall world ranking
- Number of FTE students
- Research score (including three indicators: a university's reputation for research excellence based on the institutions' responses to THE's reputation survey; research volume; and research income)
- Citations score (the average number of times a university's published work is cited in scholarly literature)
- International outlook score (including three indicators: proportion of international students, proportion of international staff, and international collaboration)

Academic Rankings of World Universities — Since 2009 the Academic Ranking of World Universities (ARWU) has been published by ShanghaiRanking Consultancy (this is why ARWU is also known as "Shanghai" Rankings), an independent organization on higher education intelligence and not legally subordinated to any universities or government agencies. According to the information available on the *About ARWU* page of ARWU's website, it uses six objective indicators to rank world universities, including the following: the number of alumni and professors that have won Nobel Prizes and other awards; the number of highly cited researchers (as chosen by Clarivate Analytics); the number of articles published in *Nature* and *Science*; the number of articles indexed in the "Science Citation Index – Expanded and Social Sciences Citation Index;" and per capita performance of a university. More than 1800 universities are ranked by ARWU every year and the top 1000 are published and promoted (ARWU, 2021).

For each indicator, the highest scoring institution is assigned a score of 100, and the scores for other institutions are calculated as a percentage of the top score. The distribution of data for each indicator—Quality of Education, Quality of Faculty, Research Output, Per Capita Performance—is examined for any significant distorting effect and standard statistical techniques are used to adjust the indicator if necessary. Scores for each indicator are weighted as shown below to arrive at a final overall score for an institution. An institution's rank reflects the number of institutions that are ranked higher and appear higher on the list (ARWU, Methodology, 2021)

This study analyzes the following ARWU indicators for the year 2020:

- Overall world university ranking
- Research output score (papers published in two well-known scholarly journals, *Nature* and *Science*; papers indexed in the "Science Citation Index-Expanded and Social Science Citation Index")
- Highly Cited Researchers score (the number of highly cited researchers selected by Clarivate Analytics; this list issued in December 2019 was used to calculate the so called "HiCi" indicator for the year 2020. Only the primary affiliations of Highly Cited Researchers are considered.)

QS World University Rankings — QS World University Rankings, which launched in 2004 is a well-known source of comparative data about university's performance. According to the information provided on their flagship website (www.TopUniversities.com)—the home of their rankings— QS rankings site was viewed 149 million times in 2019, and over 94,000 media clippings pertaining to, or mentioning, QS were published by media outlets across the world in 2019 (QS, 2021). The universities are evaluated according to six metrics: Academic Reputation based on its Academic Survey which collates the opinions of over 100,000 individuals (40 percent); Employer Reputation based on QS Employer Survey (10 percent), Faculty/Student Ratio (20 percent); Citations per Faculty (20 percent); International Faculty Ratio (5 percent); and International Student Ratio (5 percent).

For the purposes of this study, the following QS indicators are examined:

- Overall world university ranking
- Student size (actual number of students)

- Faculty size (actual number of professors)

QS also ranks the world's 100 top universities in individual subject areas, covering 51 disciplines. The goal of the "subject" rankings is to identify the world's leading schools in chosen fields "in response to high demand for subject-level comparisons" (QS Subject Rankings Methodology, 2021). Each of the subject rankings is compiled using four sources. The first two are QS's global surveys of academics and university employers, used to assess institutions' academic and employer reputation in each subject. The second two indicators assess research impact based on research citations per paper and H-index in the relevant subject. This information is drawn from Elsevier's Scopus, the well-known research citations database. The four components are then "combined to produce the results for each of the subject rankings" (QS, Subject Rankings Methodology, 2021). Given that QS is the only source of the three that examines the field of Linguistics—the focus of the discipline-specific analysis—QS's Linguistics score for relevant institutions is used in the last part of the quantitative analysis, which focuses on the types of institutions supporting the Language Science Press OA initiative.

Limitations of the quantitative study

While the results of the quantitative study provide valuable insight into the factors that may contribute to the sustainability of the crowdfunding models, the analysis is not without its limits. Part 1 of the analysis focused on the 'usage' aspects, examining three possible factors: the categories/disciplines most used, the number of user interactions, number of unique books used. While the findings showed that the institutions that support crowdfunding tend to have high usage overall, their users engaged with a wide variety of books and were particularly drawn to the books belonging to the Society & Social Sciences categories, the usage captured in this study is by no means inclusive of 'all' the usage that takes place at any of the institutions listed in Table 3). Owing to the specifics of the Creative Commons licenses assigned to OA scholarly monographs (discussed in Chapter 2), users may download digital versions of the works and save them 'locally' for the purposes of accessing them offline or to share with their peers or fellow students. Offline reading and sharing of legally sharing PDFs of OA monographs, therefore, can never be fully and accurately captured. There is simply no way of knowing how many times a user interacts with a title or passes it on to another user if the user 'leaves' the library portal or

the JSTOR platform, where usage can be captured. This study focused only on the usage that appears on the JSTOR platform and only in the context of 663 OA monographs published through KU's annual crowdfunding initiative. In addition, usage data is only captured for those titles at those specific institutions for a certain time period, which begins on January 1, 2017, and ends on September 30, 2020.

Further, Part 2 of the analysis examined six additional factors beyond usage to determine if there are commonalities among the institutions that most often support KU and, unlike Part 1, Part 2 does not include all of the institutions studied in Part 1 but 124. Thirty institutions were be taken off the list of 154 universities evaluated in Part 1, as those 30 universities were not ranked by all three sources and could therefore not be included in the 'rankings' analysis (Note: the original number of institutions in Part 1 is 167; since 13 were national libraries and not universities, they also were not included in the rankings analysis, leaving the total number of institutions ranked by all three institutions at 124). The assumption here is that the institutions that are ranked by all three sources (vs. by only one or two out of three) put a lot of effort in cooperating with the organizations behind the three ranking sources (THE Times, ARWU/Shanghai, and QS) to make sure their information is publicly available and that their institutions appear on ranking lists with as much accuracy and precision as possible. This is not to say, however, that the institutions not ranked by all three sources do not warrant a closer analysis in the context of OA monograph usage and support of crowdfunding initiatives. There could be a number of reasons why some institutions are not ranked by all three sources each year. To ensure Part 2 provided consistent and, therefore, reliable, data, it comprises the data for 124 institutions ranked by all three university ranking sources.

The survey

In an effort to gain deeper insight into librarians' perceptions of collaborative OA business models for monographs, a survey of librarians across Europe with knowledge of OA business models and their workings was conducted. The study focused exclusively on scholarly monographs (and not on scholarly journals) and on collaborative business models referred to as "crowdfunding" or "cross-institutional" global initiatives. Knowledge Unlatched, Unglue.it, and Reveal Digital were mentioned as leading example of those initiatives. The survey was

anonymous—also spanning institutions and countries, including those in the European Union as well those outside of the European Union—to pinpoint their views and perspectives in relation to global crowdfunding initiatives, the main motives behind their decisions to support them, and their overall perceptions of OA monograph publishing, its current challenges and future prospects. The online questionnaire included ten questions, two of which served to clarify their roles and degree of involvement with OA and their institutions' main focus. The other eight questions focused specifically on their thoughts, observations and experiences with the crowdfunding model as it relates to OA monographs. Three of the eight questions were open-ended.

Limitations of the survey

There are limitations to conducting survey questionnaires and inviting anonymous participants to answer a set of questions pertaining to a topic one assumes they are reasonably versed in. In the case of this particular survey, every effort was made to clarify to the participants the survey's main goal as well as what the study's main objectives. That said, some questions may be difficult for participants to fully understand. As was the case with previous surveys of librarians (e.g., OAPEN-UK study), when librarians answer questions about OA monographs, they may still be influenced by their experience of managing and dealing with OA journals, or they may simply think of OA as a general term that relates to all aspects of OA, resulting in them sharing their views on OA in general vs. OA monographs and OA crowdfunding in particular. OA monograph publishing is different from OA journal publishing, and to what extent the librarians that took part in this survey were aware of that and kept that in mind when answering their questions cannot be fully determined. It is assumed, however, that they understood the questionnaire asked them to address one type of OA content (monographs) and one type of OA business model (crowdfunding).

In addition, the very term 'collaborative,' as already discussed, eludes definition when it comes to defining OA business models for OA monographs. It has been used in literature in different ways to describe different approaches to OA monograph publishing as well as to describe different business models (as discussed in Chapter 2), and to what extent the librarians that took part in this survey were aware of that and kept that in mind when answering the questions cannot be determined. This is generally the challenge with emerging or alternative

business models—they may be viewed differently by different scholars since they are still rather new and research literature available on the topic has not yet settled uniform terms and definitions.

Lastly, while they elucidate various viewpoints and motives that may be compared against the results achieved in the quantitative analysis, they may also echo personal biases or professional frustrations. Every effort was made to encourage the survey participants to answer the given questions in the context of a very specific topic that they appeared to be qualified to address.

CHAPTER 5

RESEARCH RESULTS

The quantitative analysis of this research is divided into three parts: Part 1 is focused on the usage of KU's OA monographs, with usage data drawn from the JSTOR platform. Part 2 mines the data of three world university rankings sources—THE, ARWU, and QS—to determine what the institutions that support KU's initiatives may have in common. Six rankings indicators are the main focus of Part 2: world ranking, student size, faculty size, research output, citations, and international outlook. Part 3 is focused on the results of an anonymous librarian survey which serves to deepen the understanding of the results in Part 1 and Part 2.

Although KU is known for a wide range of OA monograph and journal collections libraries can financially support each year, it is most known for the legacy collection (first piloted in 2013) called KU Select. This study focuses on examining the usage of books from that KU collection only and on the JSTOR platform only. These are the details of the study's sample:

- Number of books from KU Select whose usage is examined: 663
- Number of categories those 663 books represent: 14
- Top five categories represented:
    - Society & Social Sciences — 240/663 books (36.20 percent)
    - Humanities (History, Archaeology, Philosophy, Religion) — 206/663 books (31.07 percent)
    - Literature & Literary Studies — 99/663 books (14,93 percent)
    - The Arts — 40/663 books (6,03 percent)
    - Economics, Finance, Business & Management — 22/663 books (3,32 percent)
- Number of publishers represented in the sample: 52
- Top five publishers represented:
    - University of Michigan Press — 56/663 books (8.45 percent)
    - transcript Verlag Roswitha Gost und Dr Karin Werner GbR — 44/663 books (6.64 percent)
    - Amsterdam University Press BV — 42/663 books (6.33 percent)

        - Brill — 36/663 books (5.43 percent)
        - Liverpool University Press — 35/663 books (5.28 percent)

- Number of institutions (including universities and national libraries) represented in the study: 167
- Number of countries represented by those 167 institutions: 32
- Total number of universities for which monograph usage is examined: 154
- Total number of national libraries for which monograph usage is examined: 13
- Total number of universities (of the total number of universities represented) which are ranked by all three ranking sources: THE, Shanghai and QS: 124
- Total number of universities not ranked by all three sources (for which only usage is measured but which are excluded from Part 2 of the quantitative analysis): 30

In order to measure the usage of KU-unlatched OA monographs in 167 institutions, Excel sheets with usage metrics were obtained from KU for all 167 institutions (one Excel sheet per institution), and each Excel sheet included the following information (in this order):

- Publisher; Title; ISBN; Bic (subject category)
- KU Collection (each KU collection is usually assigned the year it was published, with the first two called Pilot and Round 2, others include KU Select + Year)
- Publication Year (the year the title was published; note: some titles were born OA while others had earlier dates as they had already been published in print)
- Platform (since KU analytics include usage data for a variety of platforms, only those related to JSTOR were used, while other platforms were removed)
- Metric (prior to 2020, the available metric was either chapter downloads or chapter views, while in 2020, the two were combined and referred to as ‘total item requests, which is defined as the total number of times the full text of a content item was either downloaded or viewed by a user)
- Compliance (Counter 4 or Counter 5 compliance)
- Total (number of user interactions in the period between January 2017 and through the end of September 2020; the ‘total’ column is also broken down by usage interactions per month, starting with January 2017 and ending with September 2020)

A wide variety of European institutions are included in the quantitative analysis, ranging from small universities to large, research-intensive universities. National libraries are also included in the study, as they have played a vital role the advancement of OA in Europe the past decade and continue to be encouraged to participate in innovate OA initiatives involving academic books (Maricevic, 2016). National libraries across Europe have actively supported a range of OA initiatives, with the British Library setting a powerful example (Maricevic, 2016), and they have actively supported crowdfunding initiatives such as KU over the years.

Every effort was made to include usage data for a wide variety of institutions across Europe so that the sample was as wide and wide-ranging as possible. However, obtaining usage data for some institutions was more challenging than for others. Therefore, countries such as the UK are represented more substantially than the countries in Eastern Europe. The UK has been at the forefront of the OA movement from the onset, and KU was founded in London by UK-based publisher and social entrepreneur, Frances Pinter (Pinter & Montgomery, 2012). Table 3 lists all of the institutions included in the study and for which JSTOR usage data was obtained for the 663 KU titles in the time period between the beginning of January 2017 and the end of September 2020; this means that the first three quarters of 2020 were included in the study; the usage data for the fourth quarter of 2020 is not included because the data for the fourth quarter was not yet available when this research began.

Each institution is given the so-called Support Score, which ranges from 0 to 5 to reflect how many times the institution supported the KU Select initiative in the past five years, starting in the year 2016 and ending in the year 2020 (the data on annual participation per institution was also provided by KU). The Support Score reflects that participation accurately. If an institution receives the score of 0, it means it supported KU zero times, if it receives 1, it supported KU once in the past five years, etc. If an institution receives the score of 5, it means it supported KU every year since 2016 (institutions that receive the highest score are considered the most loyal supporters who KU has been able to count on to support its OA collection of academic books each year since the pilot through 2020).

The study further divides the 167 institutions into 3 distinct groups: those that do not support (Score 0), those that support rarely (Score 1 and Score 2) and those that support often (Scores 3, 4 or 5). Those that support rarely have supported less times than they did not support,

while those that ‘support often’ have supported more times than they did not support in the past five years. These three distinct groups can be broken down as follows:

- Institutions that do not support KU: 99 institutions (59.3 percent)
- Institutions that rarely support KU: 31 institutions (18.5 percent)
- Institutions that support KU often: 37 institutions (22.2 percent)

If we take a closer look at the group of institutions that support often (37 in total), we notice that only nine institutions receive the highest score (5), which means they supported KU and ‘pledged’ every year between 2016 and 2020. This makes up 5.4 percent in total, compared to 59.3 percent of institutions that have not to date participated in crowdfunding. The institutions that participated every year are bolded in Table 3 and include: University of Cologne (Germany), University of Iceland (which includes both national and university library), Leiden University (Netherlands), UiT The Arctic University of Norway, Stockholm University (Sweden), University of St. Gallen (Switzerland), University of Zurich (UK), Lancaster University (UK) and the University of Manchester (UK).

The aim of the quantitative study is to collect data for all institutions to establish the averages for three distinct groups (as described above), and, finally, to zoom in on the institutions in the ‘support often’ group that have supported every year for five consecutive years to determine if their characteristics are even more pronounced, resulting in those nine institutions standing out within their own group.

Table 3: Institutions included in the analysis by country, including Support Score for each

Country	Institution	Support Score
Austria	University of Salzburg	3
Austria	Austrian National Library	0
Austria	Johannes Kepler University Linz	0
Austria	University of Graz	0
Austria	University of Innsbruck	0
Austria	University of Vienna	0
Belgium	Royal Library of Belgium	4
Belgium	Free University of Brussels	0
Belgium	Ghent University	0
Belgium	Hasselt University	0
Belgium	KU Leuven	0

Belgium	University of Antwerp	0
Bulgaria	Sofia University	0
Croatia	University of Split	0
Croatia	University of Zagreb	0
Czech Republic	Charles University, Prague	0
Czech Republic	Masaryk University	0
Czech Republic	National Library of the Czech Republic	0
Czech Republic	Palacký University Olomouc	0
Czech Republic	University of Ostrava	0
Denmark	Aalborg University	1
Denmark	Aarhus University	0
Denmark	University of Copenhagen (National Library of Denmark)	0
Denmark	University of Southern Denmark	0
Estonia	University of Tartu	1
Estonia	National Library of Estonia	0
Finland	Åbo Akademi University	4
Finland	University of Helsinki (National Library of Finland)	3
Finland	Tampere University	1
Finland	University of Turku	1
Finland	University of Eastern Finland	0
France	Aix-Marseille University	0
France	Grenoble Alps University	0
France	Paris-Saclay University	0
France	Sorbonne University	0
France	University of Bordeaux	0
France	University of Lille	0
France	University of Lorraine	0
France	University of Strasbourg	0
Germany	**University of Cologne**	**5**
Germany	Free University of Berlin	4
Germany	Bielefeld University	3
Germany	Humboldt University of Berlin	3
Germany	Heinrich Heine University of Düsseldorf	1
Germany	University of Bonn	1
Germany	University of Freiburg	1
Germany	Goethe University Frankfurt	0
Germany	Heidelberg University	0
Germany	Ludwig-Maximilian University of Munich	0
Germany	University of Göttingen	0
Germany	University of Hamburg	0

Germany	University of Mannheim	0
Germany	University of Stuttgart	0
Greece	National and Kapodistrian University of Athens	0
Greece	University of Crete	0
Hungary	Corvinus University of Budapest	0
Hungary	Eötvös Loránd University	0
Hungary	University of Debrecen	0
Hungary	University of Pecs	0
Iceland	**University of Iceland (National and Univ. Library)**	**5**
Ireland	University College Cork	2
Ireland	Trinity College Dublin	1
Ireland	University of Limerick	1
Ireland	Dublin City University	0
Ireland	National Library of Ireland	0
Ireland	University College Dublin	0
Italy	Sapienza University of Rome	0
Italy	University of Bologna	0
Italy	University of Genoa	0
Italy	University of Milan	0
Italy	University of Padua	0
Italy	University of Siena	0
Latvia	National Library of Latvia	1
Latvia	University of Latvia	0
Lithuania	National Library of Lithuania	0
Lithuania	Vilnius University	0
Luxembourg	University of Luxembourg	0
Netherlands	**Leiden University**	**5**
Netherlands	National Library of the Netherlands	4
Netherlands	VU Amsterdam	4
Netherlands	University of Groningen	3
Netherlands	University of Amsterdam	2
Netherlands	Erasmus University Rotterdam	1
Netherlands	University of Twente	1
Netherlands	Maastricht University	0
Netherlands	Radboud University Nijmegen	0
Netherlands	Tilburg University	0
Netherlands	Utrecht University	0
Norway	**UiT The Arctic University of Norway (Tromso)**	**5**
Norway	Norwegian University of Science and Technology	3
Norway	University of Oslo	3

Norway	National Library of Norway	0
Norway	University of Bergen	0
Poland	Adam Mickiewicz University Poznań	0
Poland	Jagiellonian University	0
Poland	National Library of Poland	0
Poland	University of Warsaw	0
Poland	University of Wroclaw	0
Portugal	New University of Lisbon (NOVA University of Lisbon)	0
Portugal	University of Lisbon	0
Portugal	University of Porto	0
Romania	Babeș-Bolyai University	0
Romania	University of Bucharest	0
Russian Federation	Russian State Library	0
Russian Federation	Saint Petersburg State University	0
Russian Federation	Tomsk State University	0
Russian Federation	Ural Federal University	0
Serbia	University of Belgrade	0
Slovakia	Comenius University Bratislava	0
Slovenia	University of Ljubljana	0
Slovenia	University of Maribor	0
Spain	Autonomous University of Barcelona	0
Spain	Autonomous University of Madrid	0
Spain	Complutese University of Madrid	0
Spain	Pompeu Fabra University	0
Spain	University of Barcelona	0
Spain	University of Navarra	0
Sweden	**Stockholm University**	**5**
Sweden	National Library of Sweden	3
Sweden	Gothenburg University	0
Sweden	Lund University	0
Sweden	Örebro University	0
Sweden	Uppsala University	0
Switzerland	**University of St. Gallen**	**5**
Switzerland	**University of Zurich**	**5**
Switzerland	University of Basel	3
Switzerland	University of Bern	3
Switzerland	University of Geneva	1
UK	**Lancaster University**	**5**
UK	**University of Manchester**	**5**
UK	National Library of Scotland	4

UK	University of Reading	4
UK	University of Surrey	4
UK	King's College	3
UK	Open University	3
UK	Queen Mary University of London	3
UK	University of Bath	3
UK	University of Exeter	3
UK	University of Kent	3
UK	University of Nottingham	3
UK	University of Sheffield	3
UK	University of the West of England	3
UK	University of Westminster	3
UK	Durham University	2
UK	Loughborough University	2
UK	University College London	2
UK	University of Edinburgh	2
UK	University of Huddersfield	2
UK	University of Southampton	2
UK	Manchester Metropolitan University	1
UK	University of Birmingham	1
UK	University of Bristol	1
UK	University of Essex	1
UK	University of Glasgow	1
UK	University of Hull	1
UK	University of Liverpool	1
UK	University of Portsmouth	1
UK	University of St Andrews	1
UK	University of Sussex	1
UK	Cardiff University	0
UK	London School of Economics & Political Science	0
UK	Royal Holloway, University of London	0
UK	University of Cambridge	0
UK	University of Leeds	0
UK	University of Leicester	0
UK	University of Oxford	0
Ukraine	Taras Shevchenko National University of Kyiv	0

5.1 Usage analytics

Most-used categories

If we examine usage of categories across all 167 institutions, we can see that the most used categories are those that are most represented. Table 4 lists the dominance of categories in all institutions, followed by three groups of institutions. Regardless of which group we examine, the dominance of the same categories is present. Societal & Social Sciences is the most used categories in 131 of 167 institutions, followed by Humanities (29 institutions), then Literature (4 institutions), and, lastly, the Arts (3 institutions).

Table 4: Most used categories in all institutions and in three distinct groups (no. of institutions)

Institutions	Society & Social Sciences	Humanities	Literature	The Arts
All institutions (167)	**131**	**29**	**4**	**3**
Supported often (37)	33	3	1	0
Supported rarely (31)	28	2	0	1
Did not support (99)	70	24	3	2

Figure 4 shows the same data broken down by percentage. It reveals that the usage of books belonging to Societal & Social sciences categories is especially high in institutions that support often or rarely (vs. those that never support). Further, the institutions that support the most (‘often’) do not have any usage of the books belonging to the Literature categories (which is the highest in the institutions that support rarely), while the institutions that never support KU show the highest usage of the books in the Humanities (24.24 percent)—higher than any other group, or all three groups combined.

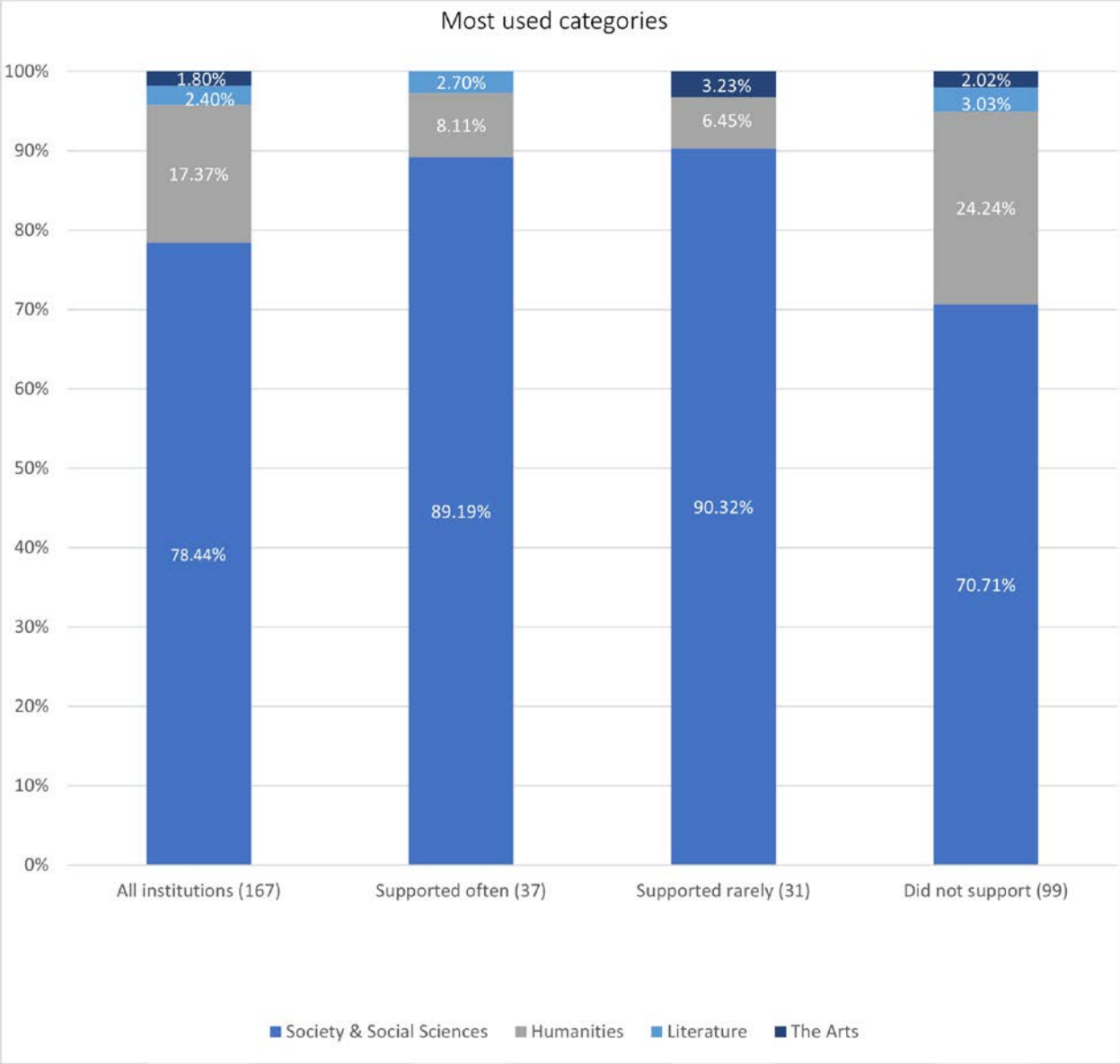


Figure 4: Most used categories in all institutions and in three distinct groups (percentages)

Three key findings may be drawn from usage of categories data: 1. Although making up 31 percent of the overall collection, the books in the Humanities category are used significantly less that the books in the Society & Social Sciences categories, which is used heavily across the board; 2) The institutions that rarely support KU see no usage of the Literature books, which is the third most dominant category of books in the collection (the Literature category is mostly used in the institutions that do not support KU); 3) The institutions that often support KU see no usage of the books in the Arts category (which is mostly used in the institutions that rarely

support KU); and 4) If we look at the institutions that have supported every year, the Society & Social Science category is the most used for all nine of those institutions. Therefore, the institutions that support KU often or always see the most usage of books in the social sciences, which makes up just below 90 percent of the usage; the remaining 10 percent goes to Humanities and Literature, with no usage of Arts books.

Usage – interactions

As mentioned, Excel sheets with JSTOR usage metrics were obtained from KU for all 167 institutions, and each Excel sheet included detailed information on the book's usage, including "Total Interactions" column, which combined chapter views and chapter downloads for each title. This study measures the usage of KU's monographs by focusing on the total number of interactions only and not looking into which institutions have more views vs. downloads. No distinction is made between the two, as they both imply user's interest in the book and that a user spent some time with the book, either by reading it on the screen without downloading, or downloading it for the purposes of making it available for offline reading. Given that CC licenses—even the strictest of the four types—allow for downloading and offline reading of OA books, these reports cannot possibly capture 'all' the usage that takes at an institution, but they track the usage of those users who access the titles on the JSTOR platform.

Table 5 clearly shows the extent of this usage in the period between January 1, 2017, and September 30, 2020, in 167 institutions for 663 books from KU's legacy KU Select collection. Of the 426,515 overall user interactions, the breakdown is as follows: 130,576 interactions take place in the institutions that support often; 122,825 in the institutions that support rarely; and the remaining 173,114 take place in the institutions that have to date not supported KU.

Table 5: Total user interactions for all institutions and for three distinct groups

Institutions	Total user interactions
All institutions (167)	**426,515**
Supported often (37)	130,576
Supported rarely (31)	122,825
Did not support (99)	173,114

As Figure 5 below illustrates: 40.59 percent of all usage takes place in institutions that have to date not participated in KU's crowdfunding initiative.

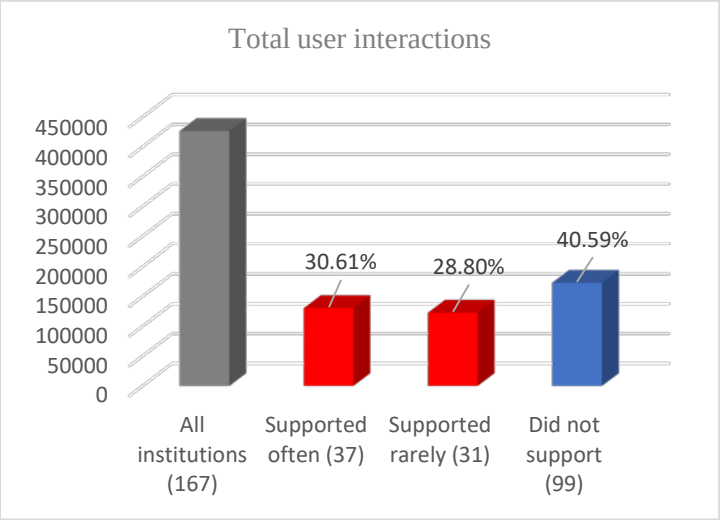


Figure 5: Total user interactions for all institutions and for three distinct groups

Further, if we examine the average user interactions per institution, we get an even more accurate picture of where KU books are actually used the most, and it does not turn out to be in the institutions that do not support KU. The highest usage takes place in the institutions that rarely support (Table 6). The average user interaction for the given period is 2,554. However, for the institutions that support often, it goes up to 3,529, while for the institutions that support rarely, the number is even higher and goes up to 3,962. The average user interaction for the institutions that do not support is below the overall average, at 1,749.

Table 6: Average user interactions for all institutions and for three distinct groups

Institutions	Avg. interactions per inst.
All institutions (167)	**2,554**
Supported often (37)	3,529
Supported rarely (31)	3,962
Did not support (99)	1,749

If we look at the two groups of institutions that support KU (often and/or rarely vs. never), we see that in both cases, they are above the overall average (Figure 6).

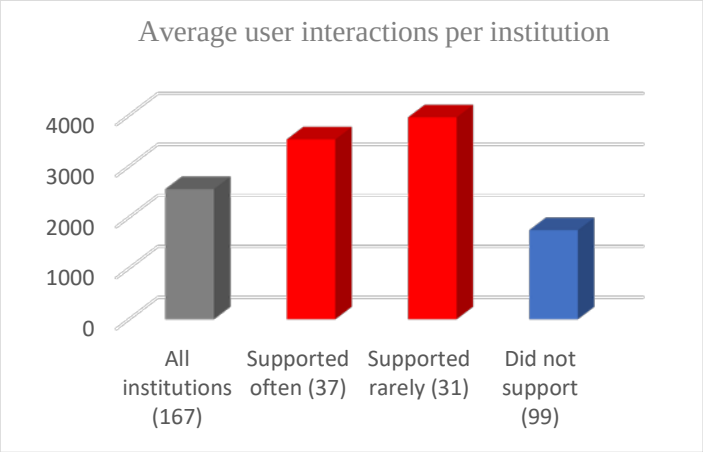


Figure 6: Average user interactions for all institutions and for three distinct groups

If we then zoom in on the institutions that support often and only examine the nine institutions that have supported every year (Table 7), we see that their average usage is higher than the overall average at 2,965, but the average number of interactions at each of these institutions varies.

Table 7: Average user interactions: Institutions that have supported every year

Institution	No. of Interactions	Avg. interactions of all (167) inst. per inst.	Avg. interactions of inst. that support every year
University of Cologne	3,740	2,554	2,965
University of Iceland	708	2,554	2,965
Leiden University	4,102	2,554	2,965
UiT The Arctic University of Norway	278	2,554	2,965
Stockholm University	1,332	2,554	2,965
University of St. Gallen	376	2,554	2,965
University of Zurich	2,808	2,554	2,965
Lancaster University	4,331	2,554	2,965
University of Manchester	**9,007**	**2,554**	**2,965**

As Figure 7 shows, the usage at the University of Manchester is exceptionally high (9,007 interactions) compared to other institutions that have supported every year, while the usage at UiT The Arctic University of Norway, is exceptionally low (278 interactions).

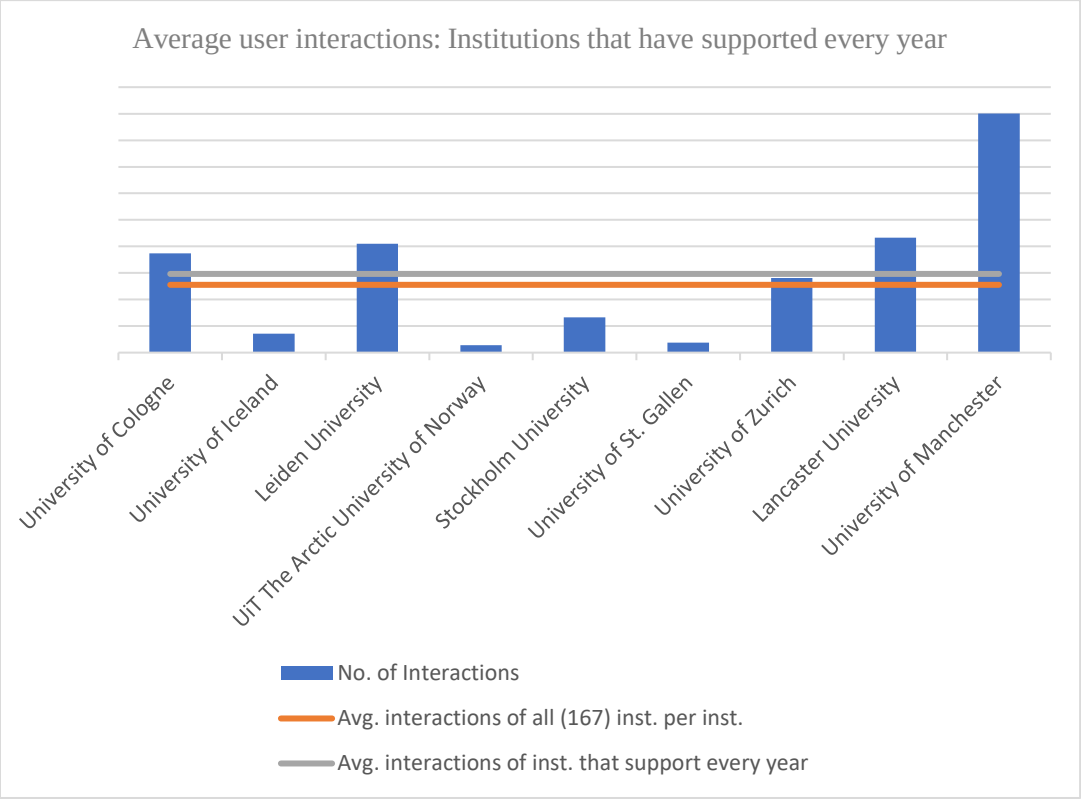


Figure 7: Average user interactions for institutions that support every year

Of course, the size of these institutions matters and determines the relevance of usage figures, but what these numbers reveal overall is that the greatest usage does indeed take place at the institutions that set aside funding for KU pledging, but not necessarily at those institutions that set aside the most funding. In other words, there is a strong connection between usage and funding but not necessarily continuous funding.

Usage — books

Also related to the question of usage is the question of how many unique books of those 663 included in the study sample are being used at various institutions. As Table 8 shows, the vast majority of the books is used across the board, particularly in the institutions that support the most (654), but every group shows significant usage. Those that do not support have a slightly higher usage of unique books (621) than those that support rarely (616).

Table 8: Total number of unique books used

Institutions	Total Unique Books
All institutions (167)	**663**
Supported often (37)	654
Supported rarely (31)	616
Did not support (99)	621

As Figure 8 illustrates, the institutions that support use 98.64 percent of the 663 books that make up the sample of this study, which means only nine titles of the overall total have not been interacted with in the timeframe set for this study (January 2017–September 2020), while the remaining 654 titles were used at least once, if not multiple times.

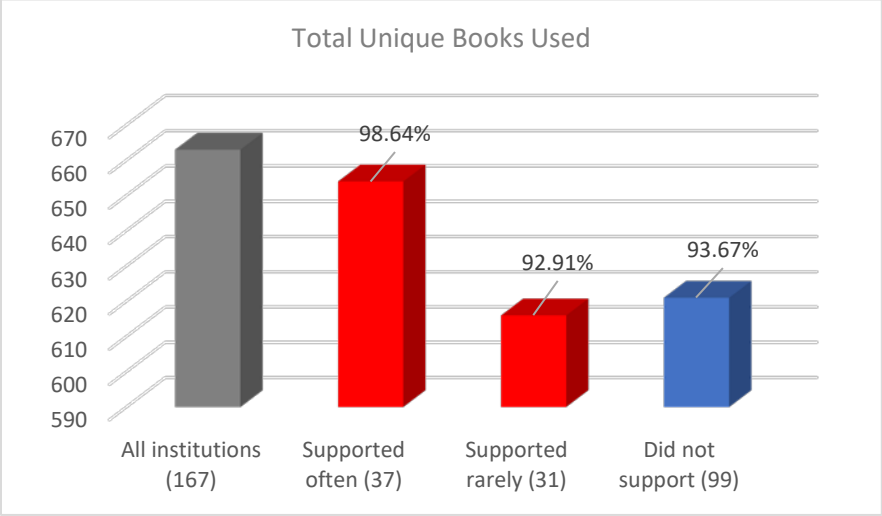


Figure 8: Total number of unique books used

While the above numbers show the total number of unique books used in each group of institutions, they do not show the average number of unique books per institution. Table 9 shows that the average number of unique books used is higher than the overall average (282 books) for both groups that support KU (315 books for 'often' and 364 books for 'rarely'), but it is lower than the overall average for the group that did not support (244).

Table 9: Average number of unique books for all institutions and for three groups

Institutions	Avg. no. of unique books per institution
All institutions (167)	**282**
Supported often (37)	315
Supported rarely (31)	364
Did not support (99)	244

Figure 9 illustrates the data in Table 9, clearly showing the highest percentage of unique books used in the 'supported rarely' group.

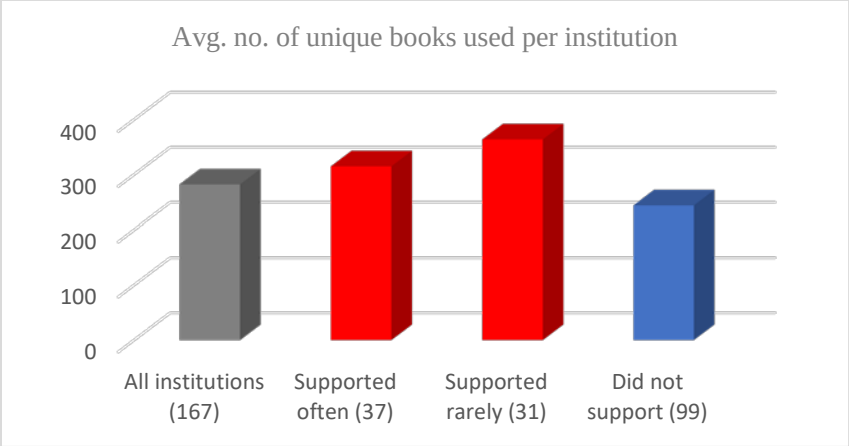


Figure 9: Average number of unique books for all institutions and for three groups

If we again closely examine the 'Supported often' group and focus only on the nine institutions that supported KU every year for five years in a row, the same conclusions for 'unique books' are reached that were reached for 'user interactions' (Table 10): while the average number of unique books used in the institutions that supported every year is higher than the overall average (321 vs. 282), the number of unique books used per institution in this group varies greatly. For instance, Leiden University comes out on top with 440 unique books used (of

the 663 books in total), while UiT in Norway again takes the last place, with only 72 unique books used.

Table 10: Average number of unique books for the 9 institutions that supported every year

Institution	No. of unique books per inst.	Avg. no. of unique books for all inst.	Avg. no. of unique books for inst. that supported every year
Univ. of Cologne	429	282	321
Univ. of Iceland	197	282	321
Leiden University	440	282	321
UiT Arctic Univ. of Norway	72	282	321
Stockholm University	284	282	321
Univ. of St. Gallen	119	282	321
University of Zurich	421	282	321
Lancaster University	426	282	321
Univ. of Manchester	501	282	321

Figure 10 illustrates this data by clearly showing the difference in the usage of unique books overall (orange line) and the usage of unique books only in those nine institutions that supported every year (grey line). The below illustration also shows that three institutions in the 'most supportive' group have usage of unique books higher than the overall average and, therefore, fall below the orange line.

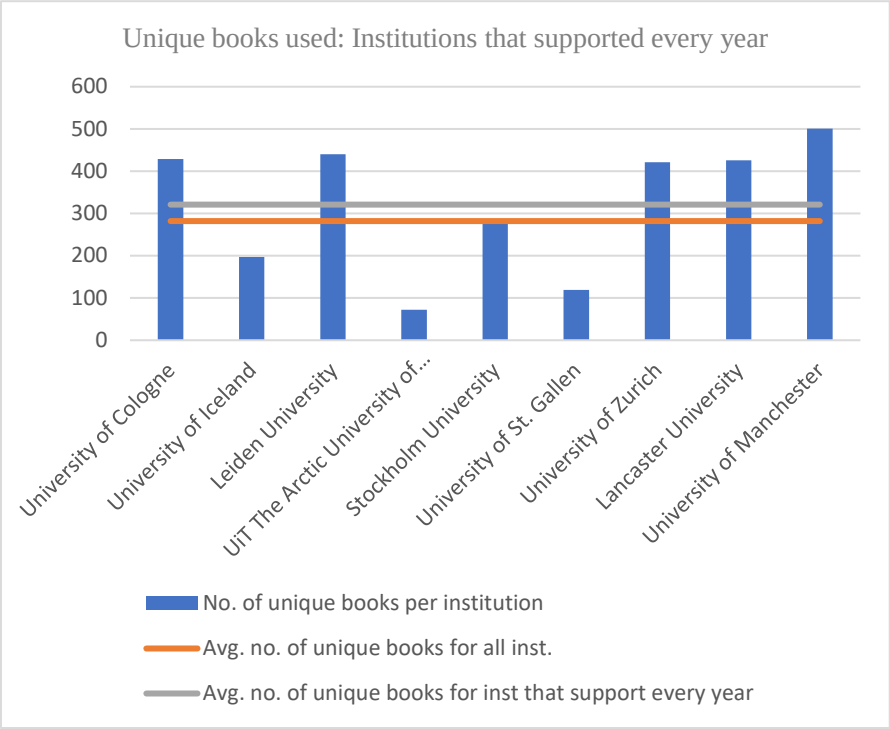


Figure 10: Average number of unique books for the 9 institutions that supported every year

Key usage results

To recap the results so far, the usage of KU books—both in terms of user interactions and unique books—appears to be the highest in the institutions with some history of supporting KU (either loyally, often, or sporadically). The institutions that support KU often see the highest usage of books in the Society & Social Sciences, which makes up just under 90 percent of the usage, while the remaining 10 percent goes to Humanities and Literature, with no usage of Arts books apparent in those institutions. Further, the most user interactions (the times users actively 'interacted' with a title) take place at institutions that set aside funding to be able to participate in KU pledging, but not necessarily at those institutions that set aside funding consistently, year after year.

Likewise, the average number of unique books used in the institutions that support KU (either often or rarely) is higher than the overall average, but the same cannot be concluded for the nine institutions that participate consistently. In other words, usage is the strongest where

there is some support of KU vs. where there is no support of KU, but among the institutions that finance KU's publishing of OA monographs loyally and participate in crowdfunding every year (in this case, nine institutions in several countries), usage data vary—from those that show above-average usage numbers (e.g., Manchester University, UK, and Leiden University, Netherlands) to those that show well below-average usage numbers (e.g., UiT University, Norway).

5.2 Institution profiles

Although some information provided by the three university ranking sources that are used in this research—THE, ARWU, and QS—is similar and may even overlap, each of these sources offers insight into at least one unique aspect that others do not. Likewise, institutions are not ranked equally across the board. In order to provide the most accurate data that help 'profile' institutions that support (or do not support) crowdfunding of OA monographs, only the institutions that are ranked by all three sources are included in Part 2 of the quantitative analysis. Of the original 167 institutions included, 30 universities are not ranked by all three sources (but may be ranked by one or two) and 13 institutions are national libraries, for which this part does not apply. This leaves 124 universities which are included in the Part 2 of the quantitative analysis, as they are ranked by all three sources. Further, when examining the institutions that have supported every year for five consecutive years, we are no longer examining the nine institutions (examined in Part 1) but seven institutions, since two institutions on the original list are not ranked by all three sources and are therefore excluded. They include the University of St. Gallen (Switzerland) and the University of Iceland.

The following indicators and scores are studied by relying on the data given by all three sources on their websites. While all three sources provide the overall world ranking score for each of the 124 institutions, other indicators are not available for each source. Below is the breakdown:

- Overall world university ranking — THE, ARWU, QS
- Student size (number of FTE students) — THE, QS
- Faculty size (number of professors) — QS

- Research output score (universities' reputation for research excellence among its peers) — THE, ARWU
- Citations score (universities' role in spreading new knowledge and ideas) —THE, ARWU
- International outlook score (universities' ability to attract students and faculty from all over the globe, not just on a national level) — THE

University world rankings analysis

The first of several rankings factors considered in this part of the study is the overall world university rankings according to all three sources. The tables and figures below show how the 124 institutions rank overall and when split into several groups (Support Often, Rarely, Did Not Support).

Table 11 shows THE world rankings for all institutions as well as for three distinct groups. The average overall THE ranking for all 124 institutions is 284 (meaning the average institution is ranked 284th in the world). When we examine the average ranking of the three individual groups, we see that those who supported often (at least three out of five times) receive the highest ranking (i.e., the lowest number): 174. The institutions that did not support KU in the past five years receive the lowest ranking (i.e., the highest number): 352.

Table 11: THE rankings for all institutions and for three distinct groups

Institutions	Avg. ranking
All Institutions (124)	**284**
Supported often (25)	174
Supported rarely (27)	205
Did not support (72)	352

As Figure 11 illustrates, while the THE ranking of the institutions that support often or rarely is in both cases well above the overall average, the average ranking of the institutions that did not support is below the overall average.

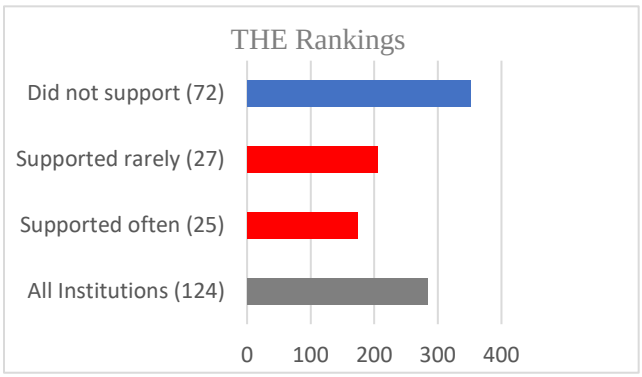


Figure 11: THE rankings for all institutions and for three distinct groups

Table 12 shows ARWU world rankings for all institutions and well as for three distinct groups. The average overall ARWU ranking for all 124 institutions is 275 (somewhat higher than THE). When we examine the average ranking of the three individual groups, we see that the highest ranking is again given to those who supported often: 204. The lowest ranking is again given to the institutions that did not support KU in the past five years (306).

Table 12: ARWU World Rankings for all institutions and for three groups

Institutions	Avg. ranking
All Institutions (124)	**275**
Supported often (25)	204
Supported rarely (27)	260
Did not support (72)	306

As Figure 12 illustrates, similarly to what Figure 11 illustrates for THE average rankings, we come to the same conclusion for ARWU rankings: while the ARWU ranking of the institutions that support often or rarely is in both cases above the overall average (the lowest number in Table 12), the rankings of the institutions that did not support are below the overall average (the highest number in Table 12).

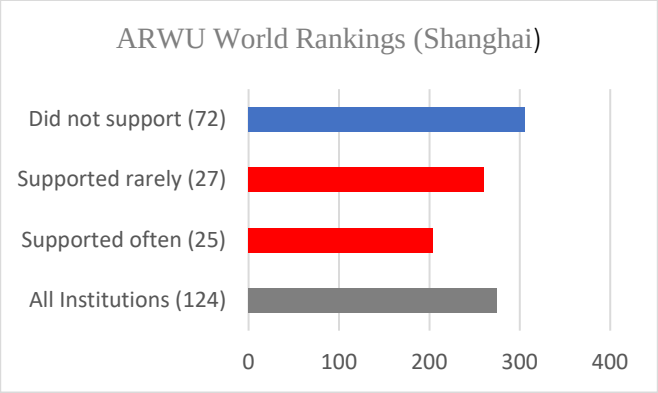


Figure 12: ARWU World Rankings for all institutions and for three groups

Lastly, Table 13 shows QS world rankings for all institutions and well as for three distinct groups. The average overall QS ranking for all 124 institutions is 283 (almost identical to THE). When we examine the average ranking of the three individual groups, we see that the highest ranking is once again given to those who supported often, 215, while the lowest ranking is given to the institutions that did not support KU in the past five years (329).

Table 13: QS World Rankings for all institutions and for three groups

Institutions	**Avg. ranking**
All Institutions (124)	**283**
Supported often (25)	215
Supported rarely (27)	220
Did not support (72)	329

Figure 13 below illustrates the same pattern already visible for THE and ARWU rankings: while the QS ranking of the institutions that support often or rarely is in both cases above the overall average (in fact, in the case of QS, the average ranking for ‘often’ and ‘rarely’ groups is not far apart 215 vs. 220), the average ranking of the institutions that did not support is below the overall average.

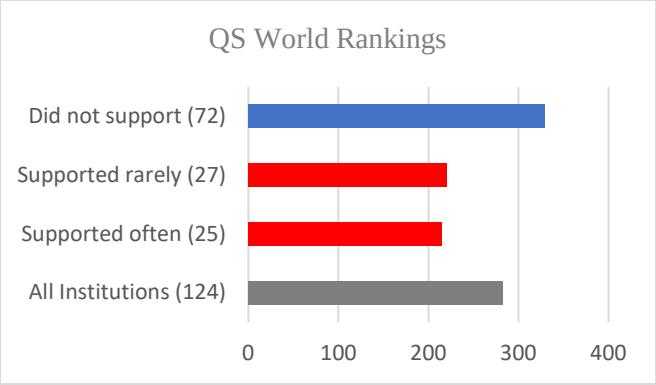


Figure 13: QS World Rankings for all institutions and for three groups

Next, if we then take the seven institutions from the 'often' group that supported every year for five consecutive years, we conclude that the average ranking of these seven is even higher than the average of the 'often' group. Table 14 shows the average world ranking for those seven institutions that supported every year. According to this data, we can calculate the average ranking for all three sources:

- THE average ranking for these seven institutions is 144
- ARWU average ranking for these institutions is 170
- QS average ranking for these institutions is 177

When all three sources are combined, the average ranking of all institutions is 280.6, while the average ranking of the seven institutions that supported every year is 163.6.

Table 14: All three world rankings for the most supportive group (institutions that supported every year)

Institution	THE world ranking	ARWU world ranking	QS world ranking
University of Cologne	145	151	282
Leiden University	70	80	128
UiT The Arctic University of Norway	351	501	416
Stockholm University	183	69	181
University of Zurich	73	56	69
Lancaster University	136	301	135
University of Manchester	51	36	27

If we examine Figure 14 (which illustrates the numbers and conclusions drawn from Table 14), we can conclude the following by examining the position of the four lines: the red lines, darker blue and lighter blue (just below darker blue) lines indicate the three average working rankings of the most supportive group (the institutions that support every year). The dotted green line indicates the average ranking of all institutions when all three sources are combined, while the dashed green line indicates the average ranking of the most supportive group when all three sources are combined. Since the dashed green line is positioned well below the dotted green line, it confirms the higher rank (lower number) of the most supportive group in compared to all institutions.

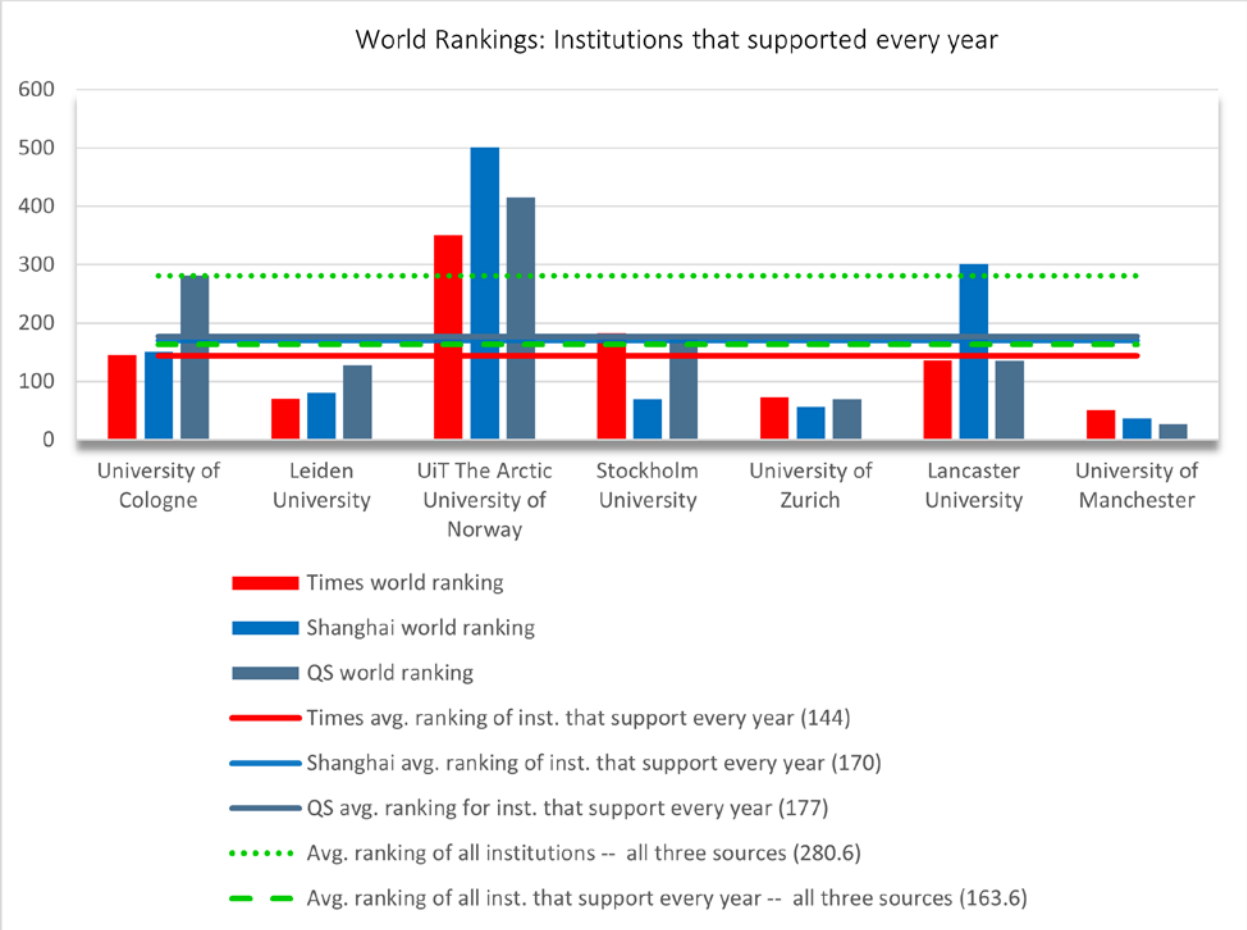


Figure 14: All three world rankings for the most supportive institutions (institutions that supported every year)

In summary, the more institutions appear to support the KU crowdfunding initiative for OA monographs, the higher their overall world ranking. The institutions that supported every year (the 'most supportive' group) on average rank higher than the institutions that supported often (at least three times in five years), rarely (one or two times in five years), or never (no support in five years). Universities' world ranking is, therefore, a reliable factor in determining if an institution would be likely to support global crowdfunding initiatives such as KU.

Student size analysis

The second factor considered as a possible indicator contributing to the sustainability of the crowdfunding model is the student size of studied institutions. The information on the number of FTE students is measured by two sources: THE and QS, and while they are rather close, the numbers for the institutions do not match, as it is challenging to accurately measure the number of students attending an institutions each year. FTE (which means 'full-time equivalency') is a calculation used to show how many students would be attending a university if they were enrolled full time. FTE is derived by dividing student credit hours by the full-time, full-year equivalent for the given level.

Table 15 shows the average number of students for all institutions and for three distinct groups, according to THE. The overall average for all institutions is 27,730 students. The average for the institutions that supported often and rarely is 24,206 and 19,609, respectively, while the average for the institutions that did not support was 31,998 (significantly higher than any group, including the main overall average).

Table 15: THE average number of students for all institutions and for three groups

Institutions	Avg. No. of Students
All Institutions (124)	**27,730**
Supported often (25)	24,206
Supported rarely (27)	19,609
Did not support (72)	31,998

Figure 15 illustrates the data from Table 15: Groups that supported 'often' or 'rarely' have less students overall than those that did not support, particularly the 'rarely' group.

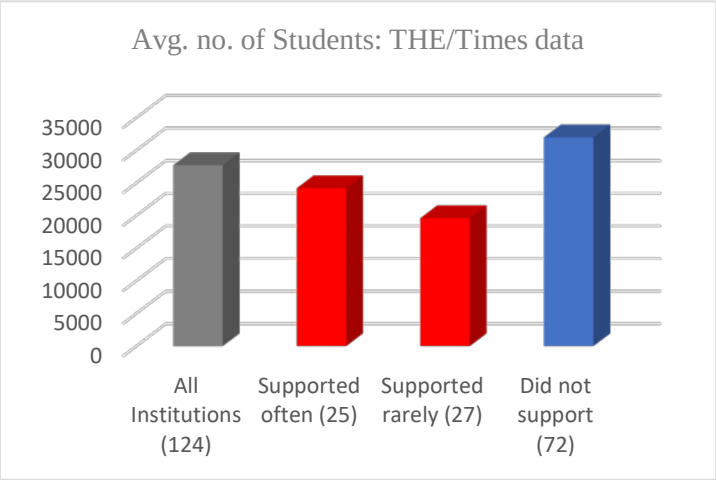


Figure 15: THE average number of students for all institutions and for three groups

Table 16 shows the average number of students for all institutions and for three distinct groups, according to QS. The overall average for all institutions is 27,409 students. The average for the institutions that supported often and rarely is 22,107 and 20,115, respectively, while the average for the institutions that did not support was 31,985 (significantly higher than any group, including the main overall average).

Table 16: QS average number of students for all institutions and for three groups

Institutions	Avg. No. of Students
All Institutions (124)	**27,409**
Supported often (25)	22,107
Supported rarely (27)	20,115
Did not support (72)	31,985

Figure 16 illustrates the QS data from Table 16 the same way Figure 15 illustrated THE data from Table 15: Groups that supported ‘often’ or ‘rarely’ have less students overall than those that did not support, particularly the ‘rarely’ group.

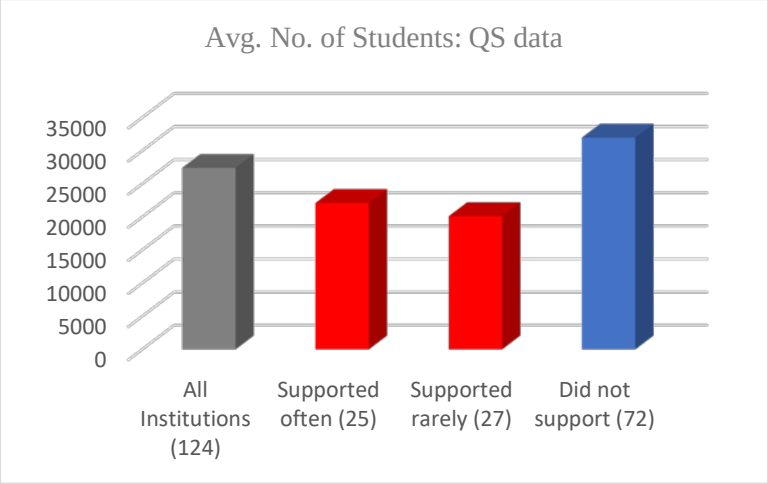


Figure 16: QS average number of students for all institutions and for three groups

If we compare THE and QS numbers in Tables 15 and 16, we conclude that the least supportive institutions have the highest number of students (higher than overall average) in both cases, and that those that support often or rarely have the lowest number of FTE students. If we examine the 'often' group again to determine the number of students in the seven institutions that supported every year (Table 17 and Figure 17), we can calculate that their average numbers of FTE students—25,550 for THE and 25,976 for QS—are lower than the overall averages given for THE in Table 15 and QS in Table 16 (these numbers are 27,730 for THE and 27,409 for QS).

Table 17: Number of students at the institutions that support every year (THE & QS)

Institution	No. of students Times	No. of students QS	Avg. no. Times	Avg. no. QS	Avg. all institutions QS	Avg. all institutions Times
University of Cologne	34,630	34,630	25,550	25,976	27,409	27,730
Leiden University	30,178	31,702	25,550	25,976	27,409	27,730
UiT The Arctic University of Norway	14,276	15,746	25,550	25,976	27,409	27,730
Stockholm University	27,200	27,085	25,550	25,976	27,409	27,730
University of Zurich	22,960	21,986	25,550	25,976	27,409	27,730
Lancaster University	13,047	13,598	25,550	25,976	27,409	27,730
University of Manchester	36,557	37,089	25,550	25,976	27,409	27,730

Figure 17 illustrates the data in Table 17, showing that of the seven institutions, four had more FTE students than THE/Times average (dotted blue line) and the QS average (dotted red line), while the remaining three institutions had less FTE students than both averages.

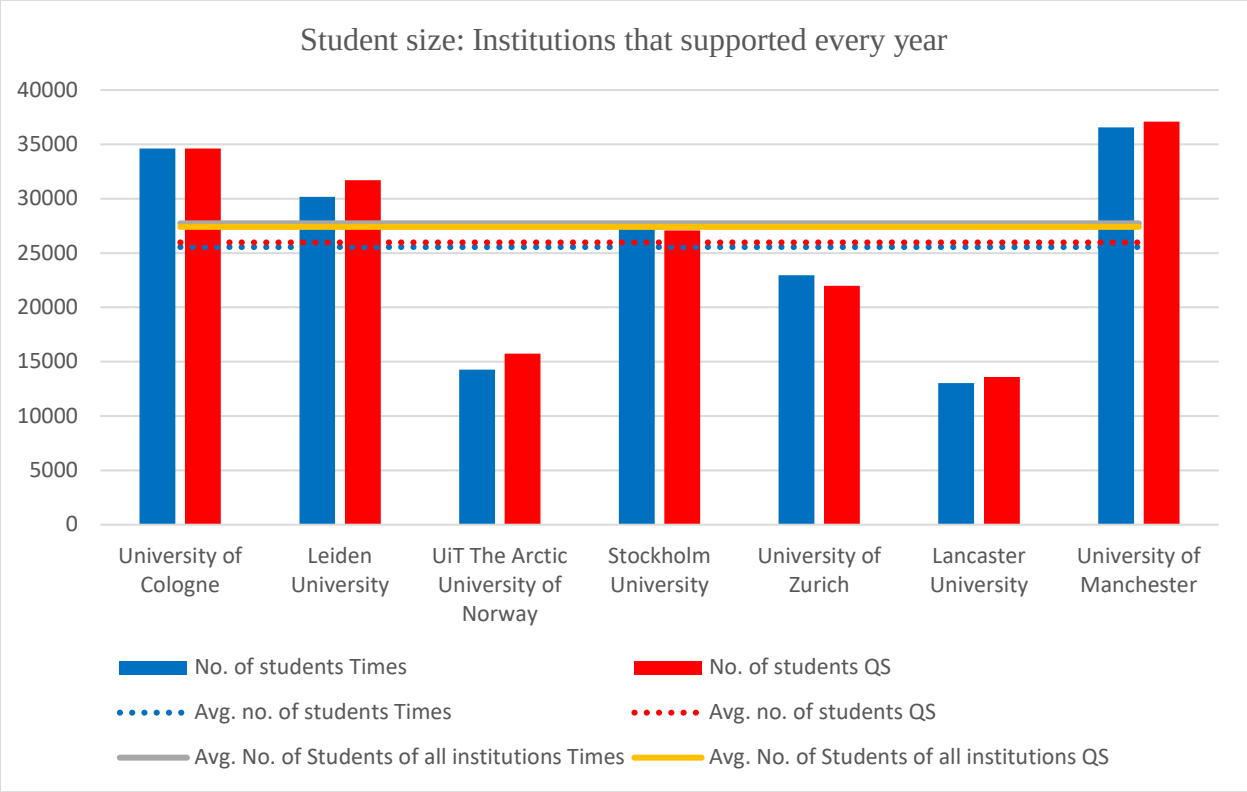


Figure 17: Number of students at the institutions that supported every year (THE & QS World Rankings)

The conclusion here is that the institutions that supported KU 'often' in the past five years tend to have a student FTE enrollment lower than the overall average, i.e., they are 'smaller' in student size than the average size of all the institutions in this study and significantly smaller than the institutions that did not support (the 'never' group). However, some of those institutions had, in fact, significantly higher than average FTE enrollment. This leads us to conclude that student size is, therefore, not as consistently reliable factor in determining an institution's tendency to support KU's crowdfunding model.

Faculty size analysis

The third factor considered as a possible indicator contributing to the sustainability of the crowdfunding model is the faculty size of the studied institutions. The information on faculty size is measured by only one source—QS—and is not available as part of THE and ARWU rankings (however, THE does provide information on student-faculty ratio). Table 18 shows that the average faculty size for all 124 institutions is 2,497, while the average faculty size for 'often' and 'rarely' groups is lower than the overall average average—2,250 for 'often' and 2,185 for 'rarely,' while the number is the highest for the institutions that did not support (2,699).

Table 18: Average QS faculty size for all institutions and for three groups

Institutions	Avg. Faculty Size
All Institutions (124)	**2,497**
Supported often (25)	2,250
Supported rarely (27)	2,185
Did not support (72)	2,699

Figure 18 illustrates this data by showing that the largest institutions that did not support have the highest number of faculty. This corresponds to the data on student size in Figure 15 and Figure 16: the institutions that did not support also have the highest number of students. Likewise, the group that supported 'rarely' has the lowest number of faculty (like students) and not the supported 'often' group.

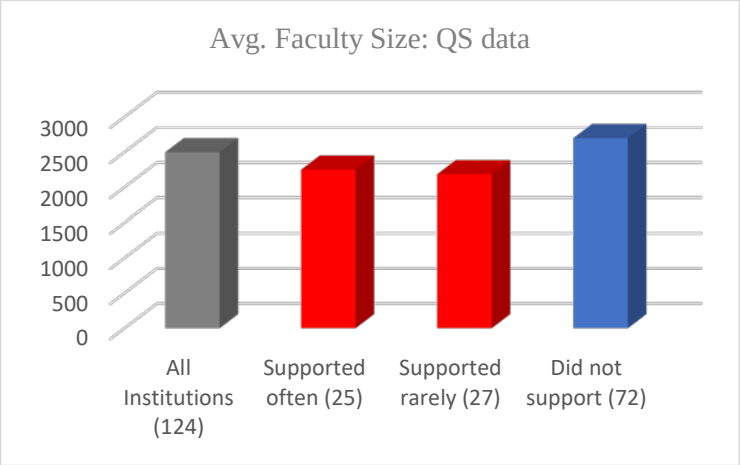


Figure 18: QS faculty size for all institutions and for three groups

In other worlds, the larger the university, the higher the number of faculty, although not proportionally higher (as the largest universities on the list do not have significantly more faculty to accommodate a large student body), leading one to question if the student-faculty ratio would be a more accurate measurement. While the information on student-faculty ratio is indeed available on THE's website for the institutions examined in this study, the focus in this study is on the overall number of faculty (not faculty-student ratio) on purpose. The goal here is not to determine the quality of teaching (which is what the "no. of students per staff' indicator represents) but instead, it is to question if the sheer size of an institution's faculty body (regardless of its relation to student enrollment) is a factor in the institution's support of the crowdfunding initiatives. In other words, the question asked here is: Are the institutions with the largest number of professors/scholars a force to be reckoned with due to the sheer size of the faculty able to back an OA initiative? The reason they would want to support an OA initiative of this kind, of course, is because they have vested interest in publishing and promoting their own scholarship and the scholarship of their disciplines. What Table 19 shows is that that the seven institutions that supported every year (the 'most supportive' group) have, according to QS, the average faculty size of 2,821, which is higher than the average for all institutions (2,497).

Table 19: Average QS faculty size for the institutions that supported every year

Institution	QS faculty size	QS avg. faculty size of all inst.	QS avg. faculty size of inst. that supported every year
University of Cologne	2,904	2,497	2,821
Leiden University	2,604	2,497	2,821
UiT The Arctic University of Norway	2,017	2,497	2,821
Stockholm University	2,325	2,497	2,821
University of Zurich	3,559	2,497	2,821
Lancaster University	1,401	2,497	2,821
University of Manchester	4,850	2,497	2,821

Figure 19 illustrates the data in Table 19 by showing that for three of seven 'most supportive' institutions, the average number of faculty is lower than the overall average.

Interestingly, these are not the same institutions for which the average number of students is lower than the overall average (Figure 18).

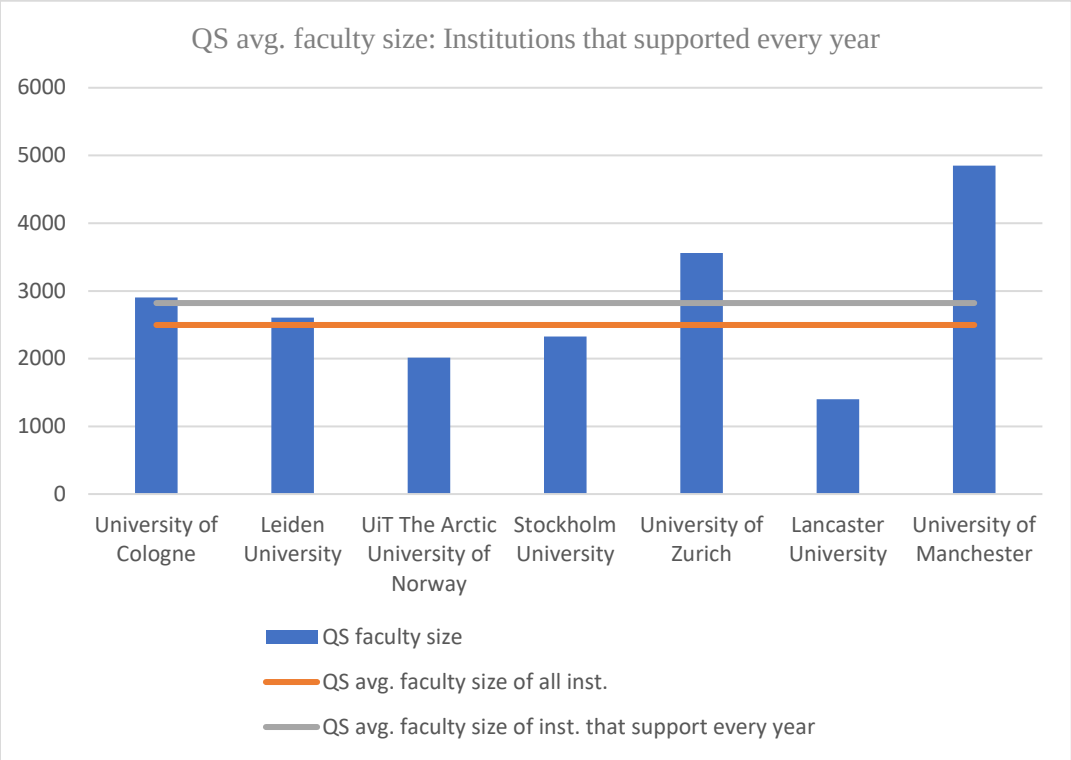


Figure 19: Average QS faculty size for the institutions that supported every year

The conclusion regarding faculty size is that it is not a reliable factor in determining an institution's tendency to support KU's crowdfunding model. Institutions that support and do not support KU vary in faculty size, from 'most supportive' yet small (e.g., Lancaster University) and 'most supportive' yet big (University of Manchester).

Research output analysis

The fourth factor considered as a possible indicator contributing to the sustainability of the crowdfunding model is the research output of the institutions. The score for the institutions' research output is given by two sources: THE and ARWU. Since the two organizations do not apply the same criteria for evaluating this particular indicator, their numbers are not comparable,

and the same averages established for the world ranking, student size, and faculty size are not applicable.

According to the THE website, the most prominent indicator in this category looks at a university's reputation for research excellence among its peers, based on the responses to its annual Academic Reputation Survey (THE, 2021). Further, as explained on the organization's web site, research income (income that is provided specifically to undertake or support research) is scaled against academic staff numbers and adjusted for purchasing-power parity (an economic theory that allows the comparison of the purchasing power of various world currencies to one another). This is a controversial indicator because it can be influenced by national policy and economic circumstances. But income is crucial to the development of first-rate research, and because much of it is subject to competition and judged by peer review, it is considered "a valid measure" (THE, 2021).

As far as ARWU's methodology for determining the research factor goes, according to the ARWU's website, ARWU examines the number of papers published in *Nature* and *Science* between 2014 and 2018 as well as the total number of papers indexed in Science Citation Index-Expanded and Social Science Citation Index in 2018. As explained by ARWU, "to distinguish the order of author affiliation, a weight of 100 percent is assigned for corresponding author affiliation, 50 percent for first author affiliation (second author affiliation if the first author affiliation is the same as corresponding author affiliation), 25 percent for the next author affiliation, and 10 percent for other author affiliations" (ARWU Methodology, 2021).

Table 20 shows that the average THE research score for all institutions is 39.8. The average research score is the highest for the institutions that supported often (43.9) and the lowest for the institutions that did not support KU (37.1).

Table 20: THE research output score for all institutions and for three groups

Institutions	Avg. Research
All Institutions (124)	**39.8**
Supported often (25)	43.9
Supported rarely (27)	43.2
Did not support (72)	37.1

Figure 20 illustrates the data in Table 20, clearly showing the research output score to be significantly higher for the 'often' and 'rarely' groups (therefore: those that support vs. not support) and the highest for the 'often' group.

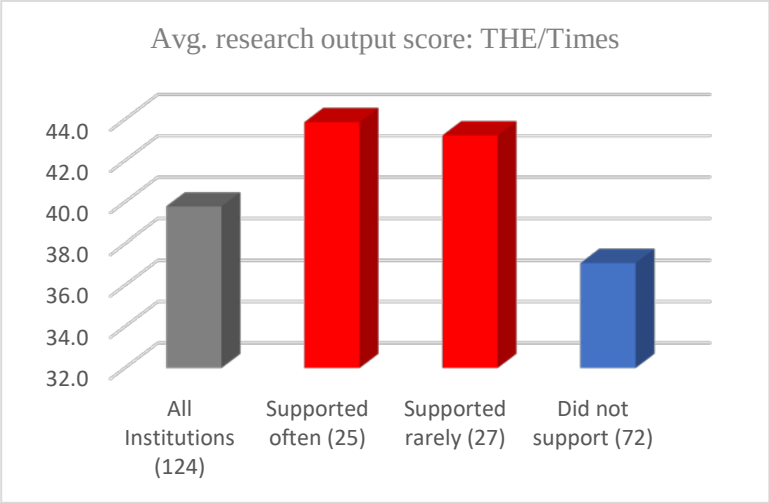


Figure 20: THE research output score for all institutions and for three groups

Table 21 show that the average AWRU research score for all institutions is 41.4. The average research score is the highest in the institutions that supported often (43.4) and the lowest in the institutions that supported rarely, rather than never, as is the case with THE research score (39.7). The institutions that did not support had the same research score as the overall average (41.4).

Table 21: ARWU research output score for all institutions and for three groups

Institutions	Avg. Research Score
All Institutions (124)	41.4
Supported often (25)	43.4
Supported rarely (27)	39.7
Did not support (72)	41.4

Figure 21 below illustrates the data in Table 21, clearly a somewhat different picture from what is offered in Figure 20: the research output score is significantly higher for the 'often' group than all other groups but the group that did not support this time does not

rank the lowest. Its score is, in fact, higher than the average score for the group that supports ‘rarely’ and the same as the overall average.

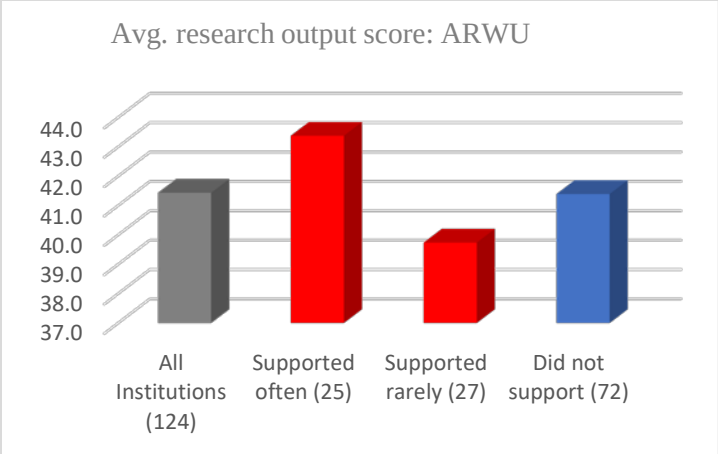


Figure 21: ARWU research output score for all institutions and for three groups

If we then take a closer look at the seven institutions that supported every year (Table 22), we conclude the following regarding the THE score: the average THE research output score for all institutions is 39.8, but the average for the seven ‘most supportive’ institutions is 48.31—therefore higher than the ‘often’ group’s average, which is 43.9 (Table 20).

Table 22: THE research output score for all institutions and for three groups

Institution	Research output: THE/Times	Avg. research output of all inst.	Avg. research output of inst. that support every year
University of Cologne	44.8	39.8	48.31
Leiden University	66	39.8	48.31
UiT The Arctic University of Norway	20.8	39.8	48.31
Stockholm University	49.2	39.8	48.31
University of Zurich	50.4	39.8	48.31
Lancaster University	40.5	39.8	48.31
University of Manchester	66.5	39.8	48.31

Figure 22 illustrates the data in Table 22, showing that the average score for the most supportive group to be higher (grey line) than the overall average research THE score for all institutions (orange line). But this does not apply to all institutions in the 'most supportive' group. One institution ranks well below both averages (UiT) while two institutions stand out for their THE research output score (Leiden and Manchester).

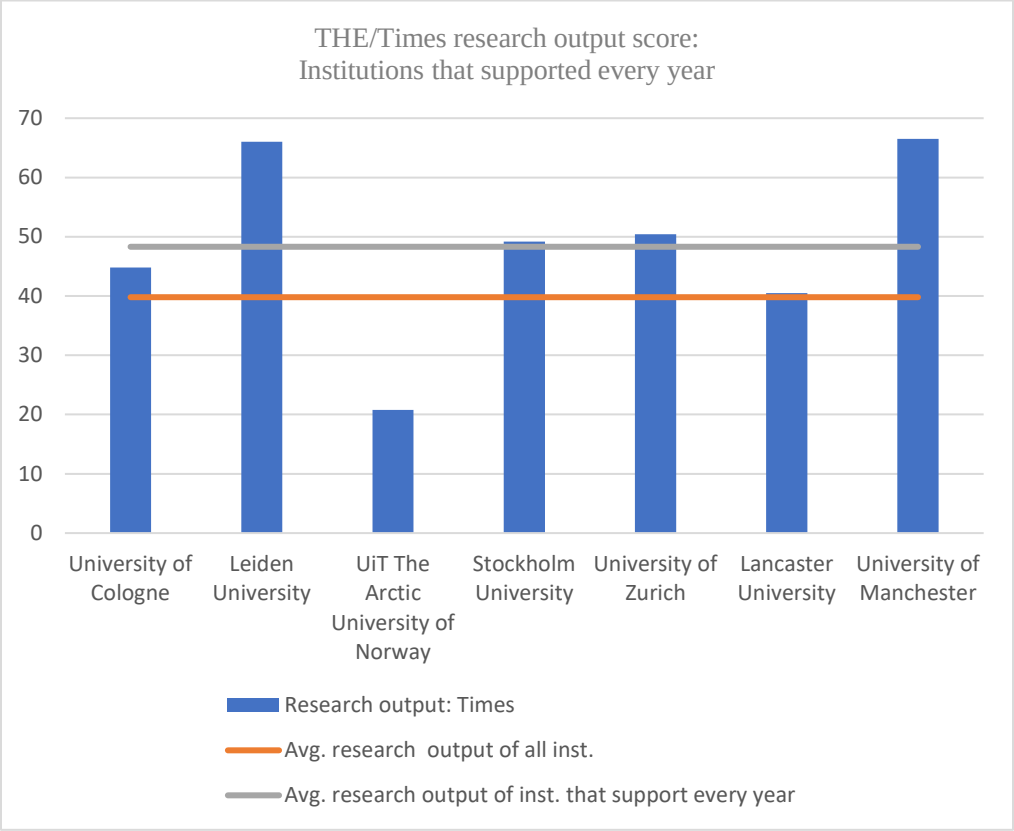


Figure 22: THE/Times research output score for all institutions and for three groups

If we then take a closer look at the seven institutions that supported every year (Table 23), we conclude the following regarding the ARWU score: the average ARWU research score for all institutions is 41.4, but the average for the seven institutions is 45.42—therefore higher than the 'often' group, which is 43.4 (Table 21).

Table 23: ARWU/Shanghai research output score for all institutions and for three groups

Institution	Research output: ARWU/Shanghai	Avg. research output of all inst.	Avg. research output of inst. that supported every year
University of Cologne	40.9	41.4	45.42
Leiden University	54	41.4	45.42
UiT The Arctic University of Norway	28.7	41.4	45.42
Stockholm University	45.1	41.4	45.42
University of Zurich	52.6	41.4	45.42
Lancaster University	35.5	41.4	45.42
University of Manchester	61.2	41.4	45.42

Figure 23 illustrates the data in Table 23, showing that the average score for the most supportive group to be higher (grey line) than the overall average research ARWU score for all institutions (orange line). As was the case with THE's research output analysis, this does not apply to all institutions in the 'most supportive' group. Two institutions rank below both averages (UiT and Lancaster) while three institutions stand out for their ARWU research output score (Leiden, Zurich, and Manchester).

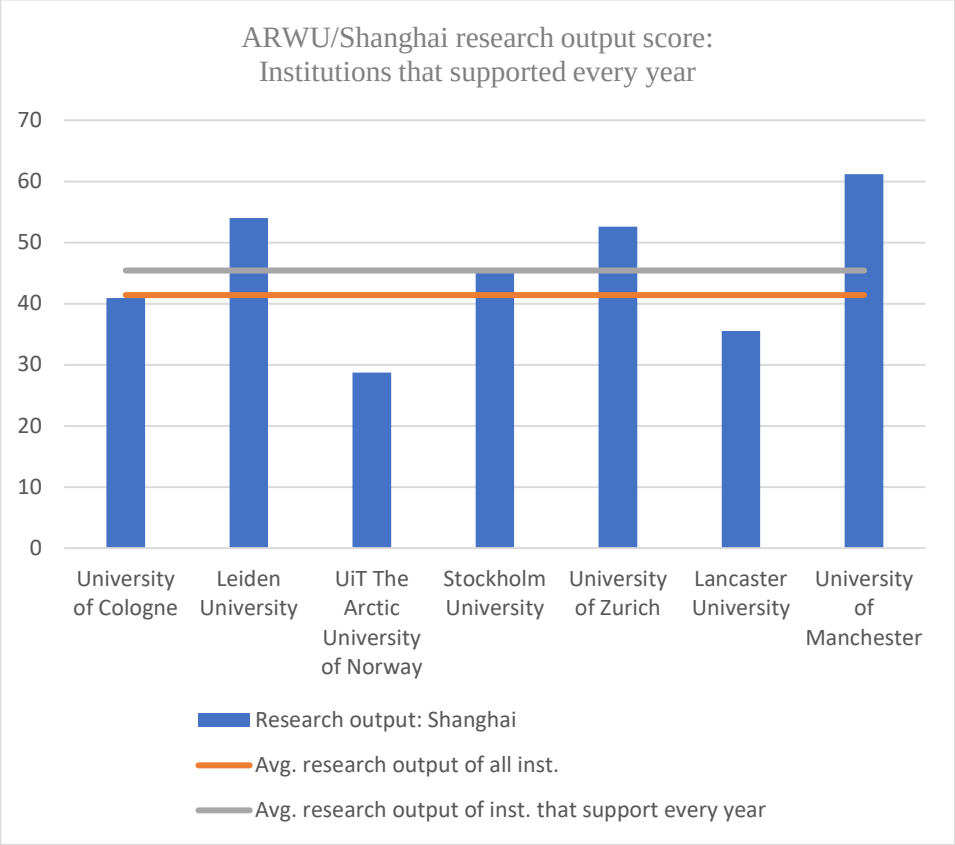


Figure 23: ARWU research output score for all institutions and for three groups

As mentioned, the criteria used for determining the research output score for THE and ARWU rankings differ (THE is reliant on a survey, while ARWU is more reliant on the data regarding papers published in *Nature* and *Science* and indexed Science Citations Index)—yielding somewhat different results—we can still draw similar conclusions: the institutions that support KU tend to have a higher research output score than those that do not. The institutions that are most supportive (i.e., that supported KU every year in the past five years) have the highest research output on average, when compared to the overall average as well as to the average of their own 'supported often' group (although the scores within this group vary among institutions).

Research output score is, therefore, a reliable factor in determining an institution's tendency to support KU's crowdfunding model. The institutions that support KU the most tend

to have a reputation for research excellence among their peers and are the most prolific in terms of the number of publications they produce and index.

Citations analysis

The fifth factor considered as a possible indicator contributing to the sustainability of the crowdfunding model is the citations score given to the studied institutions by two sources: THE and ARWU. As was the case with the scores for research output, the criteria for evaluating an institutions citations impact are not the same for the two sources, therefore, they are not comparable, and the same averages established for world rankings, student size, faculty size are not applicable.

According to THE's website, THE measures the institutions' research influence in order to determine the citations score. THE examines research influence by capturing the average number of times a university's published work is cited by scholars globally. Its bibliometric data supplier Elsevier has examined over 86 million citations of 13.6 million journal articles, article reviews, conference proceedings, books, and book chapters published over five years. The data include more than 24,000 academic journals indexed by Elsevier's Scopus database and all indexed publications between 2015 and 2019 (THE, 2021). As far as ARWU's measurement of citations impact goes, ARWU focuses on the number of 'highly cited' researchers selected by Clarivate Analytics. Only the primary affiliations of Highly Cited Researchers are considered.

Table 24 shows that the average number of citations according to THE for all institutions is 74.3, compared to 68.4 for the institutions that did not support KU (the lowest number) and 84.4 for the institutions that supported often (the highest number).

Table 24: THE average citation score for all institutions and for three groups

Institutions	Avg. Citations
All Institutions (124)	**74.3**
Supported often (25)	84.4
Supported rarely (27)	80.4
Did not support (72)	68.4

Figure 24 clearly illustrates that the institutions that supported often had the highest THE citation score than any other group.

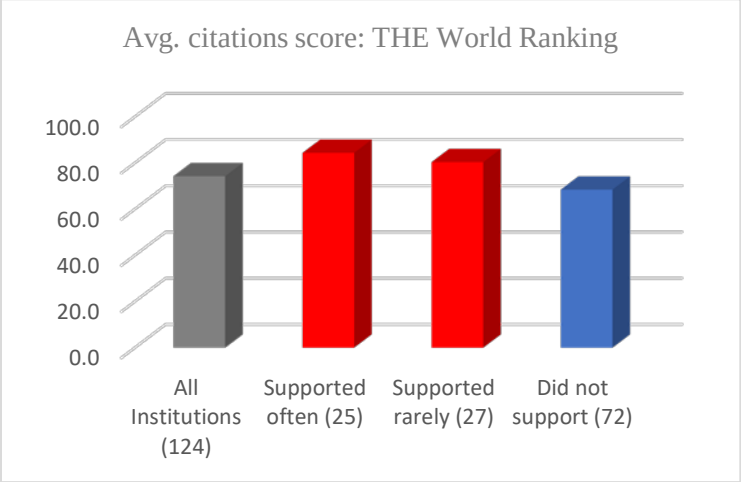


Figure 24: THE average citation score for all institutions and for three groups

Table 25 shows that according to ARWU, the average number of 'highly cited' researchers for all institutions is 14.6, compared to 12.7 for the institutions that did not support KU (the lowest number) and 17.9 for the institutions that supported often (the highest number).

Table 25: ARWU average highly cited score for all institutions and three groups

Institutions	Avg. Highly Cited
All Institutions (124)	**14.6**
Supported often (25)	17.9
Supported rarely (27)	16.7
Did not support (72)	12.7

Figure 25 illustrates that the institutions that supported often had the highest number of 'highly cited' researchers than any other group.

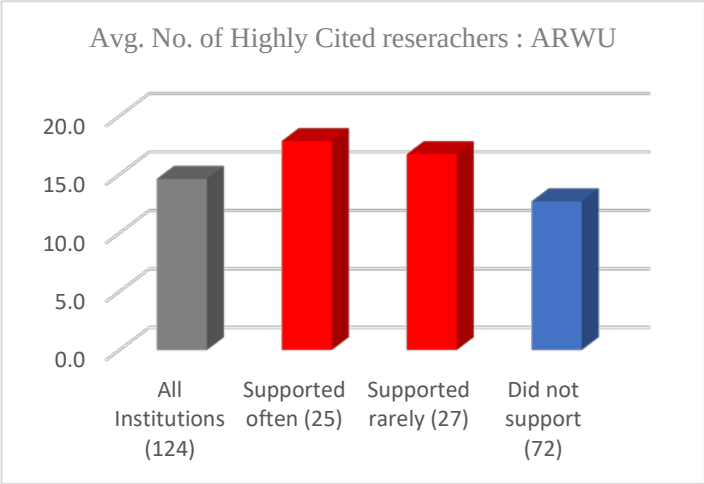


Figure 25: ARWU/Shanghai average number of highly cited researchers for all institutions and three groups

If we then take a closer look at the seven institutions that supported every year (Table 26), we conclude the following regarding the THE citations: the average number of citations for all institutions is 74.3, but the average for those that supported every year is 85.4. In fact, every one of the seven institutions in this group had a higher citations score than the overall average.

Table 26: Average THE citations score for the institutions that supported every year

Institution	THE Citations	Avg. for all institutions	Avg. for inst. that support every year
University of Zurich	89.8	74.3	85.35
UiT The Arctic University of Norway	83	74.3	85.35
University of Cologne	81.6	74.3	85.35
University of Manchester	85.6	74.3	85.35
Stockholm University	82.5	74.3	85.35
Lancaster University	90.9	74.3	85.35
Leiden University	84.1	74.3	85.35

Figure 26 illustrates the data in Table 26, clearly showing that every institution in the 'most supportive group' had more citations than the overall average (orange line).

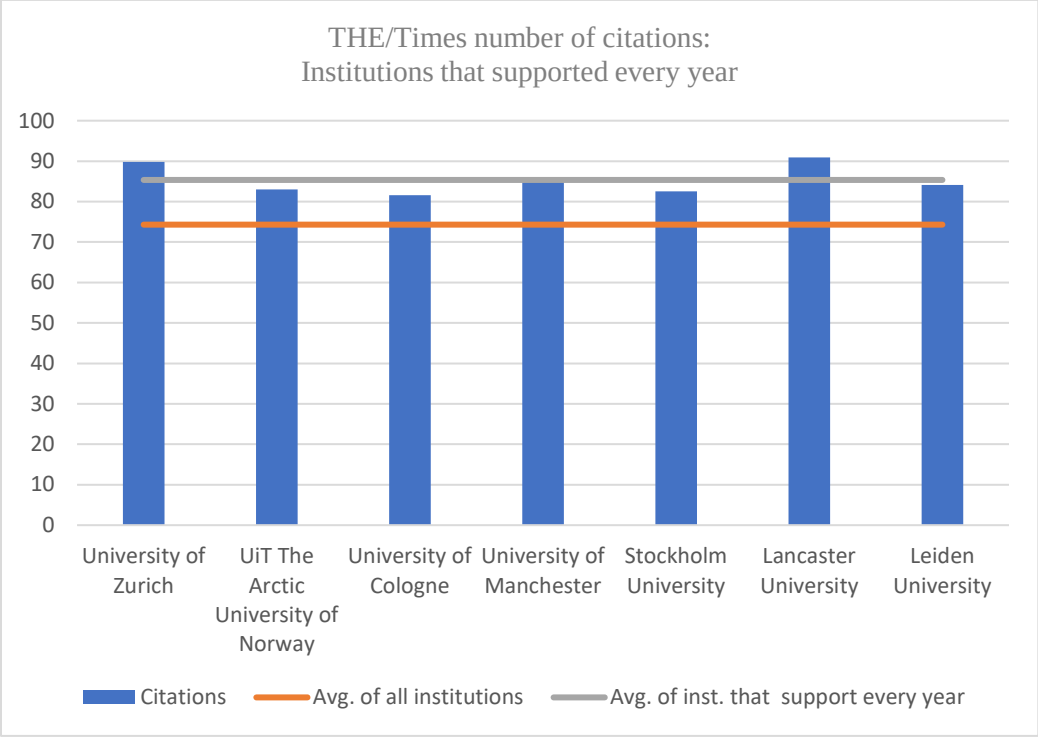


Figure 26: Average THE/Times citations score for the institutions that supported every year

If we again take a closer look at the seven institutions that supported every year to analyze the ARWU data (Table 27), we conclude the following regarding ARWU's Highly Cited numbers: the average number of 'highly cited' researchers for all institutions is 14.6, but the average for those that supported every year is 20.5.

Table 27: ARWU highly cited score for the institutions that supported every year

Institution	Highly cited researchers (ARWU/Shanghai)	Avg. for all institutions	Avg. for inst. that support every year
University of Zurich	28	14.6	20.48
UiT The Arctic University of Norway	7	14.6	20.48
University of Cologne	15.7	14.6	20.48
University of Manchester	30.5	14.6	20.48
Stockholm University	22.1	14.6	20.48
Lancaster University	12.1	14.6	20.48
Leiden University	28	14.6	20.48

Figure 27 illustrates the data in Table 27, showing that not all of the seven 'most supportive' institutions had a 'highly cited' number of researchers that is above the average for all institutions (orange line). Five out of seven did but the two that did not include UiT (Norway) and Lancaster (UK).

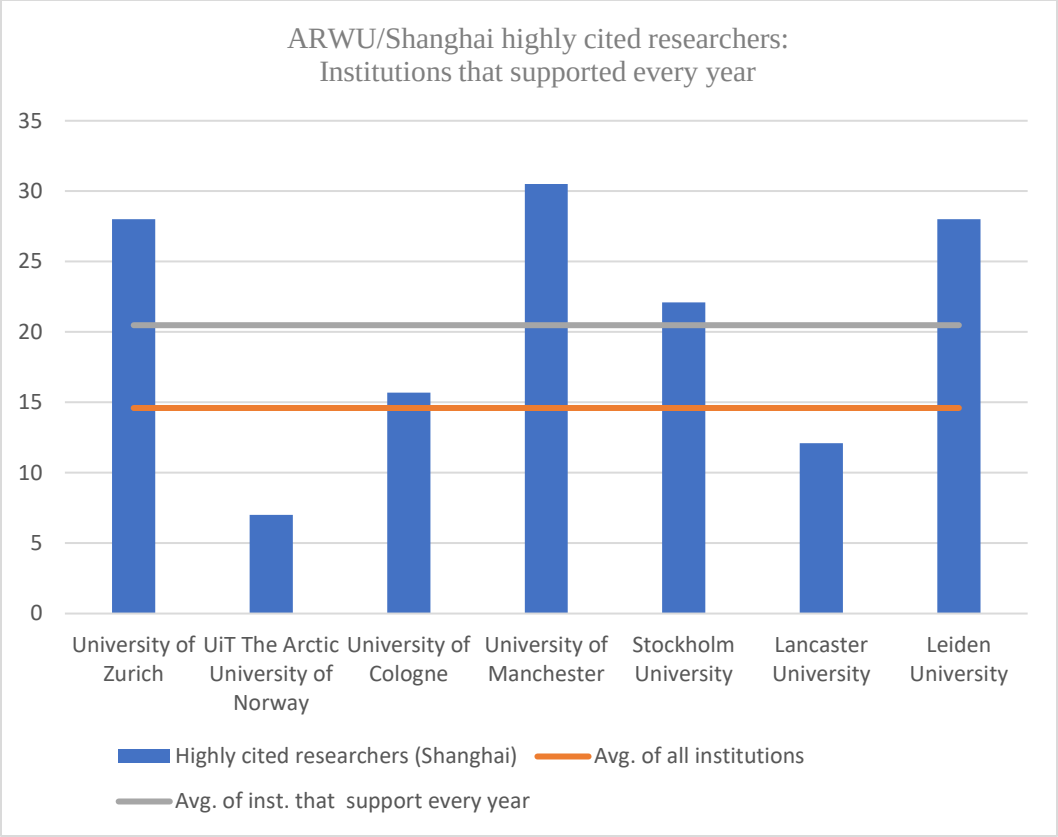


Figure 27: ARWU/Shanghai highly cited score for the institutions that supported every year

Although the criteria for determining the citations impact according to THE and ARWU differ, we can conclude the following: the institutions that support KU the most (i.e., that supported it every year in the past five years) have the highest citations impact when compared to the overall average as well as to the average of their 'supported often' group. They also have the highest number of 'highly cited" researchers than the other groups. Citations impact (both in terms of overall number of citations measured by THE and highly cited researchers measured by ARW) is, therefore, a reliable factor in determining an institution's tendency to support of KU—particularly in terms of overall citations numbers (as measured by THE). The institutions that support KU the most have on average the greatest influence in spreading their knowledge and findings and their researchers tend to be cited more than the researchers in other institutions. Citations impact is, therefore, a reliable factor in determining an institution's tendency to support KU's crowdfunding model.

International outlook analysis

The sixth factor considered as a possible indicator contributing to the sustainability of the crowdfunding model is the international outlook score given to an institution. Of the three sources, only one provides an international outlook score: THE/Times.

Given the basic principles of the OA movement—which thrives on the idea of global open research, open science and globally available and accessible knowledge to all—it seems appropriate and relevant to examine the extent to which the 124 institutions included in this part of quantitative research (again, the original number of 167 is reduced to 154 to exclude the national libraries examined in Part 1 and then to 124 to only include the institutions ranked by all three sources) consider themselves, and are considered by others, as places that thrive on internationalism and invite international collaboration of various kinds. As noted on the THE website, the ability of an institution to attract undergraduates, postgraduates, and professors from all over the world determines how successful that institution will be on the world stage. The international outlook score (which makes up 7.5 percent of the overall ranking score given to an institution by THE) comprises three indicators: proportion of international students, proportion of international staff, and international collaboration. The third indicator is especially relevant since it shows to what extent an institution collaborates with other institutions and promotes various 'collaborative' endeavors. Here THE calculates the proportion of a university's total relevant publications that have at least one international co-author and rewards higher volumes (THE, 2021).

Table 28 shows that the average international outlook score for all institutions is 72.4, compared with 81.7 and 84.4 for institutions that support 'often' or 'rarely,' respectively, while those that never support get the lowest score of 64.6.

Table 28: Average THE international outlook score for all institutions and for three groups

Institutions	Avg. International Outlook
All Institutions (124)	**72.4**
Supported often (25)	81.7
Supported rarely (27)	84.4
Did not support (72)	64.6

Figure 28 illustrates the data in Table 28, showing that the institutions that support KU in some capacity (either often or rarely) are the most 'international,' while those that do not are the least 'international.'

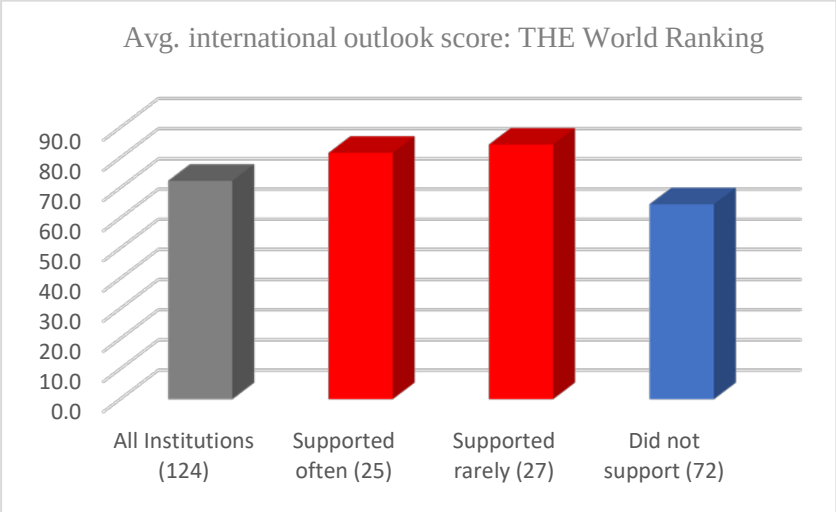


Figure 28: THE international outlook score for all institutions and for three groups

If we next examine the international outlook score for the seven institutions that supported every year (Table 29), we see that their average international outlook score is significantly higher (81) than the overall average (72.4).

Table 29: Average THE/Times international outlook score for the institutions that supported every year

Institution	THE International Outlook	Avg. International Outlook for all inst.	Avg. International Outlook for inst. that supported every year
University of Zurich	92.1	72.4	81
UiT The Arctic University of Norway	65.4	72.4	81
University of Cologne	69.6	72.4	81
University of Manchester	91.7	72.4	81
Stockholm University	71.4	72.4	81
Lancaster University	94.6	72.4	81
Leiden University	82.2	72.4	81

Figure 29 illustrates the data in Table 29, showing that four out of seven of the most supportive institutions had an individual score that is higher than the overall average (orange line), while three received a lower score.

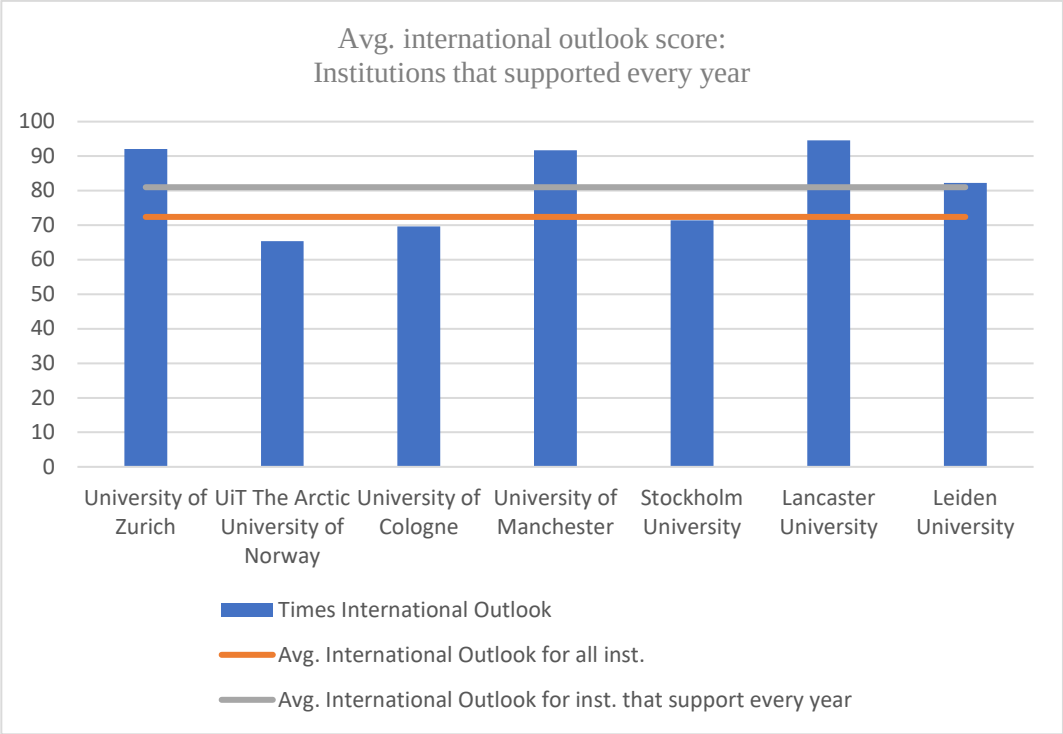


Figure 29: Average THE/Times international outlook score for the institutions that supported every year

International outlook score is, therefore, a reliable factor in determining an institution's tendency to support of KU. The institutions that support KU the most tend to be more 'international' both in terms of their staff, student origin, and the institutions' collaborative publishing efforts than those that do not support KU.

Discipline-specific analysis

Given that previous studies showed that scholars were most loyal to their disciplines (Collins & Milloy, 2016; Nature Publishing Group, 2015) and librarians often state that they are more likely to support those OA monographs that are published by the authors from their institutions—or

that cover the important disciplines to their institutions (as the librarian survey findings also confirm), the last stage in the 'rankings' analysis of this research is the examination of a specific OA subject or 'scholarly discipline' collection in relation to the financial support it receives from the institutions recognized for excellence in that discipline. The goal here is to determine to what extent the institutions that get a high ranking for a specific discipline would be willing to support it financially.

As discussed in Chapter 2, Language Science Press is a well-known OA initiative supported by hundreds of institutions worldwide and is often referred to as an example of an initiative that relies on community engagement to secure its success (Adema, 2019). In partnership with KU, LSP launched its first 'round' of monographs in linguistics to be published OA in 2017. The initiative promised to 'unlatch' nearly 100 monographs in three years' time if enough funding was received from the institutions that participated in LSP's rigorous crowdfunding campaign. The 2017 'round' proved to be successful and in 2020, LSP launched the second 'round' of monographs to be published OA for three more years. LSP asked the same libraries to 'renew' their 'pledges' (the term used in 'crowdfunding' campaigns) for three more years. LSP also invited new libraries to support the initiative in 2020 that did not support in 2017 (KU, 2021).

Of the three ranking sources, QS is the only one that provides a score for this discipline. To measure the QS data against the available data on who supported LSP initiative in 2017 and 2020, a different approach is used in this part of the quantitative analysis than the approach used when measuring the six indicators (world ranking, student size, faculty size, research output, citations impact, and international outlook). Since QS only ranks top 100 institutions (the 100 with the highest world ranking) for this particular discipline, this list was narrowed down to only include the institutions appearing in the original list of universities in Part 1 (154) and it was determined that 25 of those institutions appear on QS's list of 100 ranked for Linguistics. Therefore, the data for these 25 institutions is analyzed.

Table 30 shows the 25 institutions that are given a subject ranking for Linguistics on QS World Rankings. Of these 25 institutions, 12 pledged (i.e., financially supported) both times (getting the LSP support score of 2); four institutions supported one out of two times (getting the LSP support score of 1) and the remaining 11 institutions, although recognized for their strong

contributions in the field of linguistics, did not pledge (getting the LSP support score of 0). To calculate the relation between the LSP support score and the QS Linguistics score, averages are established for each of the three groups (as shown in Table 30).

- the average QS score for the group with LSP score 2 is 74.06 (most supportive)
- the average QS score for the group with LSP score 1 is 72 ('somewhat supportive')
- the average QS score for the group with LSP score 0 is 71.42 ('not supportive')

Table 30: Institutions' support of Language Science Press and their QS Linguistics score

Institution	LSP support score	QS Linguistics score	QS score average
KU Leuven	2	69.6	74.06
University of Helsinki	2	72.9	74.06
University of Cologne	2	65.7	74.06
Ludwig-Maximilian University of Munich	2	70.4	74.06
Humboldt University of Berlin	2	75.6	74.06
Leiden University	2	76	74.06
UiT The Arctic University of Norway	2	67.2	74.06
University of Zurich	2	75.1	74.06
Queen Mary University of London	2	71.9	74.06
University of Manchester	2	73	74.06
Lancaster University	2	82.3	74.06
University of Edinburgh	2	89	74.06
Free University of Berlin	1	65.5	72
Radboud University Nijmegen	1	67.9	72
University of Oslo	1	65.4	72
University of Cambridge	1	89.2	72
University of Vienna	0	76.1	71.42
Sorbonne University	0	67.4	71.42
University of Hamburg	0	66.3	71.42
Utrecht University	0	69.7	71.42
Pompeu Fabra University	0	65.2	71.42
Autonomous University of Barcelona	0	68.3	71.42
University of Geneva	0	67.9	71.42
University of Essex	0	65.7	71.42
University of Birmingham	0	68.8	71.42
University College London	0	81	71.42
University of Oxford	0	89.2	71.42

As Figure 30 illustrates, the higher the LSP score (marked on the graph for each institution), the higher the average QS Linguistics score (black line).

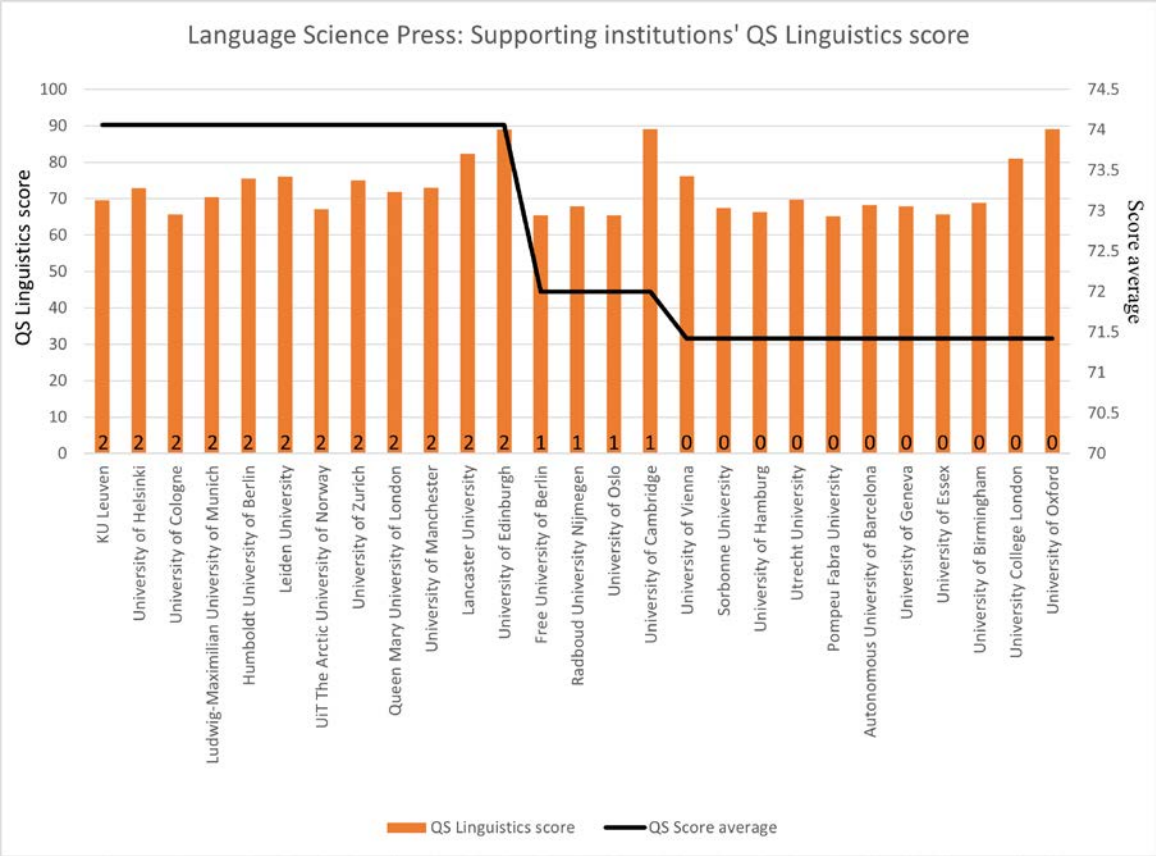


Figure 29: Institutions' support of Language Science Press in relation to their QS Linguistics score

It can, therefore, be concluded that the institutions recognized for their achievements in the field of linguistics do indeed support OA initiatives designed to publish quality scholarly monographs in that disciplines. A ranking score an institution receives for a specific discipline is a reliable factor in determining an institution's tendency to support an OA crowdfunding initiative in that discipline.

Key rankings results

By taking a closer look at the six university rankings factors (overall world ranking, student size, faculty size, research output, citations impact, and international outlook) given by three of the world's most well-known and popular ranking sources—THE/Times, ARWU/Shanghai, and QS—we are able to draw dependable conclusions about the type of institutions that are more inclined to support KU's crowdfunding initiative (based on their participation in the initiative the past five years, from 2016 through 2020). What follows is the listing of key findings:

- The institutions that financially support OA monographs through crowdfunding in some capacity (rarely or often vs. never) tend to have a higher overall world ranking than the institutions that do not. The institutions that are most supportive (supported every year for five years) on average rank higher than the institutions in any other group. Therefore, they are most likely to support.
- The institutions that financially support OA monographs through crowdfunding in some capacity (rarely or often vs. never) tend to have a student FTE enrollment lower than the overall average student enrollment, i.e., they are 'smaller' in size than the average institutions on the list and significantly smaller than the institutions that did not support. However, not all of the institutions that showed some support were smaller in size; some had significantly higher-than-average FTE enrollment.
- The institutions that financially support OA monographs through crowdfunding in some capacity (rarely or often vs. never) tend to have a higher average faculty size than the average for all institutions. However, not all of the institutions that showed some support were smaller in faculty size; some had significantly higher-than-average number of teaching staff.
- The institutions that support KU the most enjoy on average the highest reputation for research excellence among their peers.
- The institutions that support KU the most tend to have the greatest research output and their researchers are on average cited more than the researchers in other institutions. Those that support the most also have the highest number of 'highly cited' researchers.

- The institutions that receive high ranking scores for specific disciplines (in this case, linguistics) tend to support the OA initiatives tied to those disciplines (in this case, Language Science Press).

In conclusion, the most reliable factors for determining the types of institutions that have thus far been the most supportive of KU's crowdfunding model for OA monographs—and are therefore most likely to support other crowdfunding business models for OA monographs—include the institution's world ranking, research output score, citations impact, and international outlook score. Data relating to student size and faculty size (i.e., the size of those institutions in terms of the number of students and the number of teaching staff) may be used as supplementary factors in determining an institution's tendency to support an OA initiative like KU, but they are not the strongest indicators.

The institutions most likely to fund crowdfunding projects for the purpose of publishing OA monographs may, therefore, be described as follows: they are highly ranked overall, they stand out for their scholarly contributions, particularly in relation to research output, citations impact, and international outlook. Lastly, scholarly community-driven OA initiatives focused tied to specific disciplines tend to get the most support from the institutions that have strong reputations in that scholarly discipline or field and are rank very high in that discipline.

5.3 Librarian survey

The quantitative analysis of the basic factors that contribute to the sustainability of the crowdfunding model for OA monographs—namely usage of books and profiles of institutions—is supplemented by an anonymous survey with librarians in an effort to draw generalizations about their viewpoints and motives and to determine if their opinions match their actions thus far when it comes to financially support the publishing of OA monographs via this particular business model. The survey asked librarians affiliated with university and national libraries across Europe—who are knowledgeable of and involved with OA initiatives—to answer ten questions. The first eight questions focused on the reasons why they supported or did not support the library crowdfunding business model for OA monographs and what they considered to be the

main obstacles in their decision-making process as well as for OA publishing in general. The last two questions served to clarify their roles and responsibilities as well as their institutions' main scholarly focus.

A link to an online survey was sent to librarians in a range of institutions—from large, research-intensive universities and proactive national libraries to small, discipline-focused institutions—via email and the announcement was posted in several online library groups focused on OA, inviting members of those groups to take the survey if they are librarians involved with OA in any country in Europe (and only Europe). Participants were given four weeks (between January 25th and February 21st, 2021) to respond to the survey without revealing their identities. 160 librarians responded to the survey in the given period, with 80 percent identifying themselves as being directly involved with OA initiatives at their institutions and 20 percent were not directly involved but showed high interest in the progress of OA monographs. 46.3 percent identified themselves as "decision-makers" (either sole decision-makers or one of several decision-makers) and 32.5 percent said they took part in OA initiatives at their institution but did not have the authority to make decisions regarding funding OA monographs (Figure 31).

Participants were asked to choose one answer among five available choices related to their role (Table 31).

Table 31: Participants' choices and answers regarding their role

	Choices	**Total responses**
•	I am the decision maker on all Open Access endeavors.	8
•	I am one of several decision makers on Open Access matters.	66
•	I am not a decision maker, but I am involved with Open Access.	52
•	I am not involved with Open Access, but I am interested in its development.	32
•	Other	2

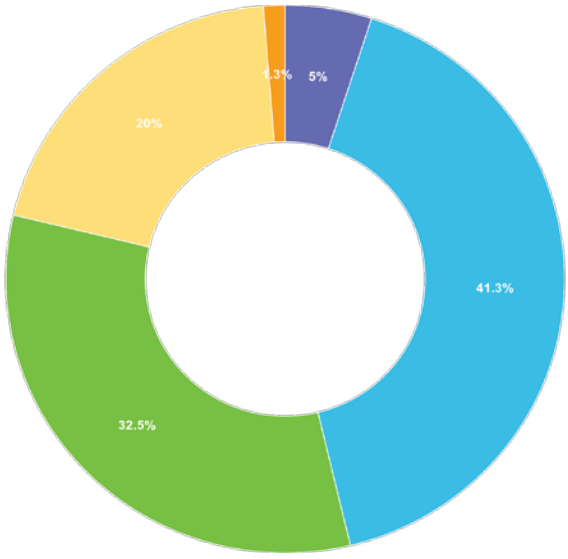


Figure 31: Participants' role in the context of OA in their institution

The respondents' institutions' main academic focus varied still heavily leaned toward the HSS field: 27.2 percent said the primary focus of their institution was the Humanities; likewise, for 27.2 percent it was Social Sciences; for 22.3 percent it was STEM; for 18.1 percent it was the Arts; and for the remaining 5.1 percent, the chosen answer was "Other" (Figure 32), which participants described as "multi-disciplinary," "all," "business," or "law." The participants could choose all that applies to their institutions among five given choices (Table 32).

Table 32: Participants' choices and answers regarding their institution's main focus

	Choices	*Total responses*
•	Arts	82
•	Humanities	123
•	Social sciences	123
•	STEM	101
•	Other	23

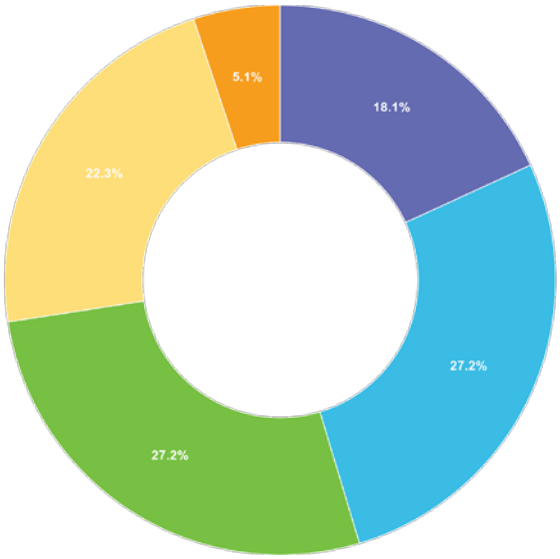


Figure 32: The participants' institutions' main academic focus

As Tables 30 and 31 and Figures 31 and 32 show, the survey's participants came from various types of institutions, but the vast majority were librarians involved with OA initiatives in various European institutions whose main focus is the Arts, Humanities and Social Sciences (72.5 percent). These are precisely the categories which make up most of KU collection of books examined, which is the focus of the quantitative analysis, as explained in Methodology (Chapter 4; Table 2, Figure 3).

Librarians' views and motives[1]

While the survey brought several findings regarding librarians' confidence in collaborative OA business models for monographs, a key finding which should hardly come as a surprise is that librarians still believe (and are therefore willing to support) the basic principle of OA—despite the obvious obstacles standing in their way. They appear to be willing and motivated to support OA business models for scholarly books via crowdfunding so that they may be available worldwide freely and without restriction. Librarians also recognize the benefits of local benefits

[1] Owing to early interest in the results of this survey, a small part of the survey's findings were published on the Common Place website on April 1, 2021 (after mentor's acknowledgment and approval: https://commonplace.knowledgefutures.org/pub/ff7gb1h2/release/1). This section of the chapter is derived from the published article.

(i.e., the benefits of OA publishing for their own communities) and understand that when they contribute their own funds to such initiatives, they are investing in the resources used in their own communities.

This study confirms what previous studies already confirmed: OAPEN-UK 2014 librarian survey (discussed in Chapter 2) revealed that 80 percent of librarians would support OA monograph publishing merely in principle (Collins & Milloy, 2016). This study did not focus on a particular business model, but it did show librarians' commitment to OA, not only relating OA journals but also relating OA monographs.

Nearly 53 percent of respondents said they supported OA initiatives because of the belief that scholarly knowledge and research should reach researchers worldwide (Figure 33). In comparison, 16.1 percent also believed that scholars should not carry the burden of paying to publish their research; instead, their institutions should financially back the publishing of their monographs (Figure 33). Supporting local researchers is in many ways an extension of librarians' beliefs that OA should be supported in principle as it directly benefits scholars and researchers (rather than investors, for example).

Further, librarians do not think that high usage of monographs in their institutions should justify participating and that they should consider supporting even if usage was not high locally. Only 4.4 percent of respondents feel that unfavorable analytics (i.e., low usage) discourages them from participating (Figure 33). This viewpoint was reinforced in the question about whether high usage of OA scholarly books at their institution positively influenced their decisions regarding participating. Here 50 percent of respondents acknowledged that usage was relevant but not crucial. In comparison, nearly 46.3 percent said that high usage of monographs locally should motivate institutions to consider support crowdfunding initiatives (Figure 35). In other words, librarians' awareness that OA monographs are used locally is encouraging and an advantage but not the deciding factor.

46.3 percent of librarians said they *did not* support (or could not support) collaborative OA models owing primarily to tight or non-existent budgets (Figure 34). Another 20.8 percent said they did not support such initiatives because they did not think the titles would be relevant for their local communities (Figure 34). The issue of the relevance of disciplines brings to mind the issue of content quality and publisher reputation brought up in many studies previously (and discussed in Chapter 2) and which scholars have cited as the reasons they remained cautious

about OA monographs (e.g., Rittman, 2018; Adema, 2019). Although this argument was stronger in the early years of OA monograph publishing, it appears to have subsided recently. Case in point: many established and reputable publishers have since embraced the publishing of OA monographs and their OA monographs undergo the same peer review process as the titles published non-OA.

As mentioned, it matters to librarians that the scholarly books published OA covered the subjects and disciplines relevant to their communities. 48.8 percent of respondents said their institutions should support crowdfunding OA initiatives if their collections covered the disciplines that matter to their local communities (i.e., the disciplines institutions are heavily invested in). 49.4 percent said they would be more inclined to participate if the subjects/disciplines directly or indirectly supported their institution's programs (i.e., they could be used as teaching materials) (Figure 37). Only 1.9 percent said that information about the types of disciplines covered should not have significance (Figure 37). Likewise, it seems to matter if the monographs to be funded are authored by local scholars. 50.6 percent of librarians said they believed institutions should support OA collections featuring the work of the researchers affiliated with their institutions, while nearly 47.5 percent believed this was an important but not a crucial factor (Figure 36).

The first few questions of the survey centered on studying the relevance of local rather than global impact of OA monographs. The focus was on usage data, author affiliation, disciplines covered, and local impact. The results showed that librarians remained committed to supporting OA monographs even if their local communities have no immediate benefit. However, they seem particularly motivated when authors are affiliated with their own institutions. When asked about the importance of local impact as a determining factor for supporting OA monographs, only 10.6 percent felt it was 'extremely important' that local impact was evident (i.e., that financed books were used at their institution, that monograph authors were affiliated with their institutions, and/or that the subjects the monographs covered are relevant for their local community of researchers), 38.8 percent said it was 'relatively important.' In comparison, 45 percent felt it was 'important but not crucial.' In other words, for half of the respondents proof of local impact was 'extremely important' or 'relatively important,' while for the other half it was not crucial (45 percent) or not important at all (6 percent).

These findings show that librarians find some aspects (e.g., usage) encouraging to but not vital to their decision-making. One of the limitations of this particular question in the survey (Question 6, Table 38) is that it was more focused on the importance of local impact through the prism of several factors. It is possible that some librarians answered this question with usage as the key factor regarding 'local impact,' and did not take into consideration other local factors worth considering (e.g., locally-based publisher, the institution's university press).

The question of sustainability (Question 7, Table 39) yielded similar results as the question about local impact: 48.8 percent believed collaborative/crowdfunding OA models would succeed if libraries worldwide continued to participate in large numbers, while 49.4 percent were undecided, as they believed more time was needed to evaluate the model's long-term sustainability (Figure 39). This confirms librarians' awareness that although the library crowdfunding model for OA monographs has had a few years to mature—and initiatives such as KU and LSP are just two of many examples pointing to its staying power as they have been around for a number of years—it is still perceived by many as 'new,' 'emerging,' and 'alternative,' and more proof of its success is needed for them to actively support it. If we apply the elements of the innovation diffusion theory (IDT), which was used to build the theoretical foundation for this research, those respondents who are still questioning the model's effectiveness even though it's had time to mature and many institutions have supported it (the Early Majority), most likely belong to the Late Majority group—i.e., the institutions that are among the last to join pioneering or groundbreaking scholarly initiatives as they are often skeptical about new ideas and they need to be reassured every step of the way that their investment will be worthwhile. One of the ways to get their assurance is to wait long enough for many others to put any new idea to test enough times to prove its effectiveness and longevity.

The reasons for those librarians' indecision were brought to light in the last question, which asked them about the main obstacles facing OA monograph publishing today (Question 8, Table 40). It should come as no surprise that no single 'obstacle' dominates the chart (Figure 40), although the high cost of OA monographs was the most popular answer: over a third (32.1 percent) of librarians said the key obstacle to supporting OA monograph publishing was the steep cost of the monographs (Figure 40).

The other reasons selected had to do with:

- not enough established or well-known scholars participating (19.3 percent)

- librarians being overwhelmed with trying to keep up with OA initiatives and their many facets (12.3 percent)
- supporting journals and subscription services still being a priority and allocating funds for them means no funds left over for monographs (13 percent)
- more business models needed to be tested to determine what worked best for all sides of the scholarly ecosystem (11.3 percent)

The following 'reasons' each got five or less percent of the overall responses: 1) Content published traditionally is still of higher quality (5 percent) and 2) More institutions from small countries and emerging markets need to participate in crowdfunding (3 percent). Here librarians were allowed to choose two questions and the vast majority selected two (rather than one) answers, as they were 300 answers to this question by 160 participants.

What Figure 40 illustrates vividly is how 'colorful' librarians' concerns really are. The cost of funding OA monographs still being high remains a key issue and a key obstacle for most librarians, but it is far from the only obstacle on their minds. Unsurprisingly, then, a significant percentage of the participants (49.4 percent; Figure 39) are not ready to make final judgments about the crowdfunding model's sustainability and want to watch its further development in the face of the other obstacles they see standing in the way, particularly not enough funding to stretch their budgets.

The survey's structure

The Survey Planet software was used for the purposes of conducting the survey. A unique URL was generated for the survey, which was shared with participants via email and through online discussion groups regarding OA. The participants were given the following introduction to the study:

> "Collaborative (crowdfunding) models for Open Access (OA) scholarly books (monographs) rely on the participation of institutions worldwide to annually fund them. This study examines the sustainability of such collaborative OA models, with the goal to determine which factors contribute to the success of their. The study also investigates the

perceptions of librarians and their motivations to support the publishing of OA scholarly books via crowdfunding initiatives."

The survey comprised ten questions, two of which served to identify (profile) the participants in the context of OA and the focus of their institutions. The other eight questions explored librarians viewpoints and beliefs. What follows is the breakdown of the choices and total responses given for each of the eight questions:

Question 1: What are the main reasons you support (actively or in principle) collaborative OA models? Choose a maximum of two answers. (Table 33; Figure 33)

Table 33: Participants' choices and answers regarding the main reasons for supporting collaborative OA models

Choices	*Total responses*
The principle of supporting open science accessible to scholars worldwide	144
The influence of library colleagues	13
The encouragement of scholars in our institution	17
The belief that scholars should not pay for publishing but institutions	44
Analytics show that Open Access titles get used at our institution	12
The books and disciplines covered seem relevant	33
Other	10

For Other, participants added the following responses. Some of these responses overlap with the existing choices that make up Question 1, while others offer new perspectives, which help us understand the complexity and wide range of librarians' concerns:

- collaborative sharing, learning and growing from each other
- addressing the problem of piracy
- publicly funded research should be publicly available with no/limited reuse restrictions
- as an institution we shouldn't have to pay to publish and pay to read what we've paid to publish

- information has no value when kept secret or behind a paywall
- for smaller fields, the unrestricted access to information is essential for their progress
- to ensure the existence and sustainability of these initiatives
- reducing the market power of commercial academic publishers
- OA is a much fairer model to authors, universities and the wider public than traditional publishing
- funders mandates

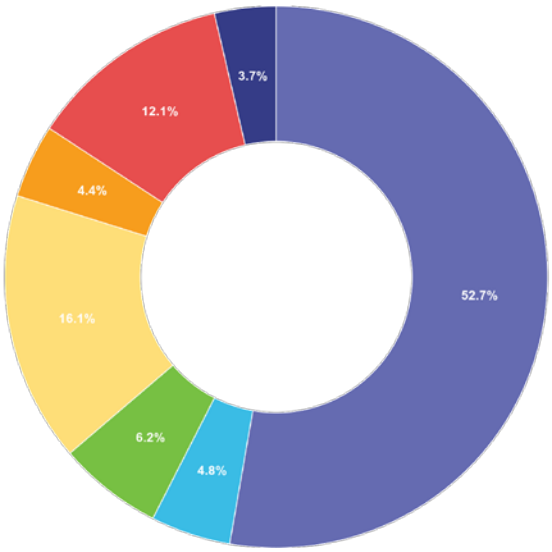


Figure 33: The main reasons for supporting collaborative OA models (percentage)

Question 2: What are the main reasons you do not support (or would not consider supporting) collaborative OA models? Choose a maximum of two answers. (Table 34; Figure 34)

Table 34: Participants' choices and answers regarding the main reasons for not supporting collaborative OA models

Choices	*Total responses*
• No budget or budget cuts	120

Choices	*Total responses*
Other priorities (e.g., investing in local Open Access repositories)	41
The books and disciplines do not seem relevant	54
Usage of Open Access books seems to be low at our institution or in general	11
Our institution's focus is Open Access journals, not books	20
Other	13

For Other, participants added the following responses, some of which overlap with the existing choices, while others help us understand the complexity of librarian's concerns (Note: nine of the 13 *Other* responses included the information; the remaining four were left blank):

- feeling our budget goes into profits of commercial publishers/aggregators
- no time to prepare/develop the resources/materials
- no buy-in by Faculty/ administrators
- editorial standards and peer review, nothing DIY
- is not a priority for researchers/authors
- commercial aspects of crowdfunding models (they are not always offered by non-profits)
- if the aggregated price of various open access initiative would be higher than that of large commercial databases
- we do not want to pay for something 'that is online anyway'

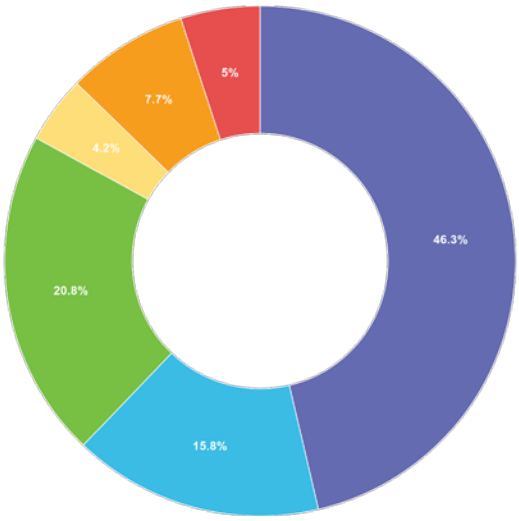


Figure 34: The main reasons for not supporting collaborative OA models (percentage)

Question 3: Does high usage of OA monographs at your institution positively influence your perceptions of OA models and your willingness to participate in crowdfunding monographs? Choose one answer. (Table 35; Figure 35)

Table 35: Participants' choices and answers regarding the relevance of high usage of OA monographs

Choices	*Total responses*
• Yes, high usage statistics should motivate institutions to support Open Access books	74
• No, it makes no difference if books get used at an institution	6
• Evidence of usage is relevant but not crucial	80

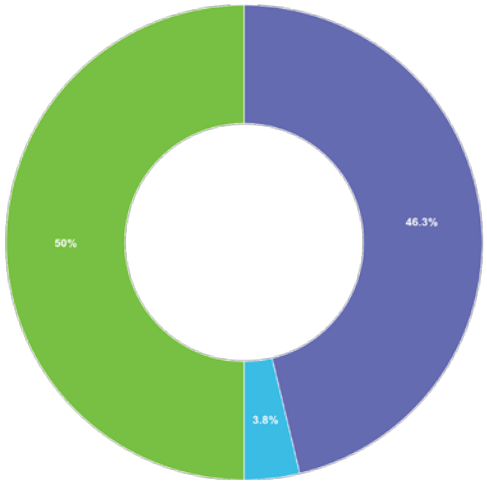


Figure 35: The relevance of high usage of OA monographs (percentage)

Question 4: If your institution's scholars are on the list of authors whose monographs will be published OA, should your institution financially support or consider supporting those OA collections? Choose one answer. (Table 36; Figure 36)

Table 36: Participants' choices and answers regarding the relevance of the authors' affiliations

Choices	*Total responses*
• Yes, institutions should support the funding of their researchers' books	81
• No, information about the author's affiliation is not relevant	3
• Institutions may be more inclined to participate, but this is not the key factor	76

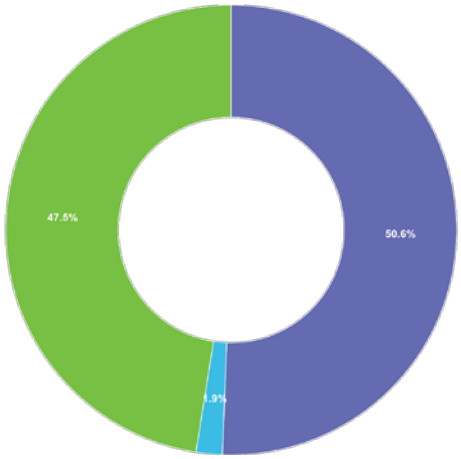


Figure 36: The relevance of the authors' affiliations (percentages)

Question 5: If disciplines relevant to your institution are the focus of an OA monograph collection, should your institution financially support that collection? Choose one answer. (Table 37; Figure 37)

Table 37: Participants' choices and answers regarding the relevance of scholarly disciplines

Choices	*Total responses*
• Yes, institutions should support the disciplines that matter to them	78
• No, information about the disciplines covered is not relevant	3
• Institutions may be more inclined to participate, but this is not the key factor	79

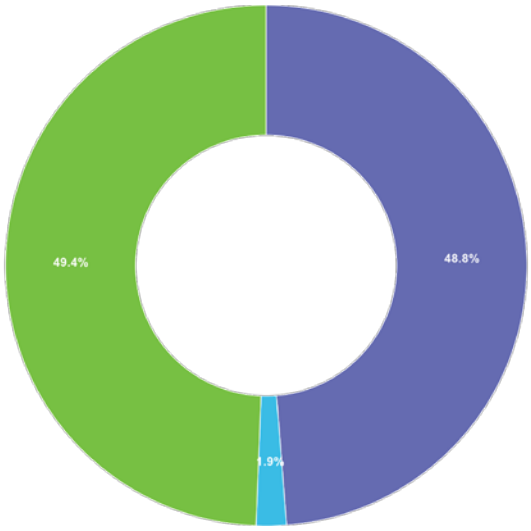


Figure 37: The relevance of scholarly disciplines (percentages)

Question 6: How important is local impact of OA monographs funded through collaborative models, i.e., that they are heavily used in the institutions that fund them? Choose one answer. (Table 38; Figure 38)

Table 38: Participants' choices and answers regarding the relevance of local impact

Choices	*Total responses*
extremely important	17
relatively important	62
important but not crucial	72
not important	9

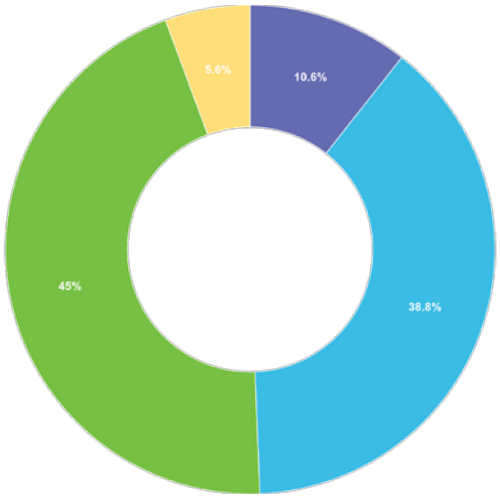


Figure 38: The relevance of local impact (percentages)

Question 7: Do you believe that collaborative models for OA monographs are sustainable long-term if libraries worldwide participate in large numbers? Choose one answer. (Table 39; Figure 39)

Table 39: Participants' choices and answers regarding their thoughts on the sustainability of collaborative models

Choices	*Total responses*
• Yes	78
• No	3
• Perhaps; more time is needed to draw conclusions	79

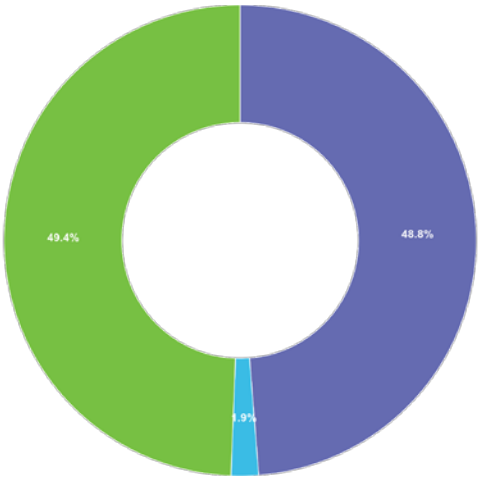


Figure 39: Thoughts on the sustainability of collaborative models (percentages)

Question 8: What do you consider to be the main challenges of OA monograph publishing today? Choose a maximum of two answers. (Table 40; Figure 40)

Table 40: Participants' choices and answers regarding the main challenges of OA monograph publishing

Choices	*Total responses*
The cost of funding Open Access books is still high	94
Content published traditionally is still of higher quality	14
More quality publishers and scholars need to participate	58
More Open Access business models for academic books need to be tested	34
More institutions from small countries and emerging markets need to participate	9
Librarians are overwhelmed with Open Access options and business models	37
Supporting academic journals and various subscription services takes priority	39
Other	15

For Other, participants added the following responses, some of which overlap with the existing choices, while others highlight additional issues that librarians see as ‘challenges’ of OA monograph publishing:

- academics knowledge of and belief in value of OA books
- Publishing open access books is still too much in the hands of commercial publishers, making our spending way to high. Universities need to make a shift and take control of publishing.
- Lack of time / buy-in
- Free rider problem (why pay for something that is online anyway)
- The whole chain of supply, from writer to reader, has to be considered. Sometimes there are conflicting interests.
- Policies focus on Journal Articles. When they focus on books it will be on individual books. Funders aren’t accounting for crowdfunding models, so it can be hard to find and justify the money.
- academics have to be clear in their support and their institutions must reward this support
- In some fields the Open Access is not understood yet and therefore perceived as less prestigious than the established commercial publishers.
- Uncertainty if it is legal to pay for memberships / voluntary contributions etc. with public spending policies
- one of the main challenges for OA book publishing is making the contents so relevant that libraries can justify investing in the publishing of books which are freely available to researchers anyway. In other words, why should diminishing library budget funds be spent on what is essentially free to the library’s customers, instead of paying for non-free materials that the customers need?
- Academics in the HSS (i.e., the disciplines focusing on book publishing) are still very reluctant in advocating open access, be that in a cooperation with a traditional publishers and their OA-model or with self-publishing or scholar-led initiatives
- Lack of funding opportunities for OA books
- The misinformation by traditional academic publishers as to the quality, sustainability, and reach of OA

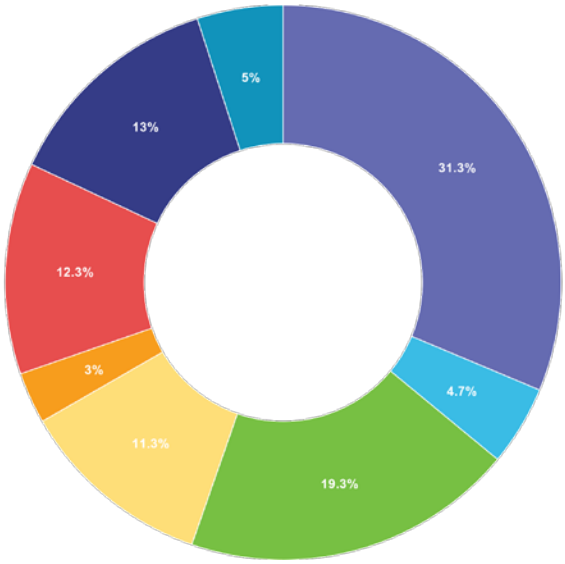


Figure 40: The main challenges of OA monograph publishing (percentages)

Summary of the survey's results

In summary, European librarians continue to have confidence in publishing scholarly books OA via crowdfunding. Their motivations are largely still rooted in the belief that scholarly knowledge in all forms—including long-form scholarship delivered by scholarly books and/or monographs—should be available without restrictions worldwide both to scholars and researchers and to general readers worldwide. Librarians appear to be more interested in participating in such initiatives when 'local' benefits are apparent, but they are very willing to consider supporting such initiatives even if they are not. While evidence of local usage is seen as somewhat (rather than relatively or extremely) relevant, it does not appear to be the deciding factor. As already seen in the usage analysis (Parts 1 the quantitative research), the institutions that support KU's crowdfunding initiatives are not always the institutions with the highest usage (e.g., UiT The Arctic University of Norway). While usage does not appear to be the deciding factor—instead, it is the principle of supporting the basic tenets of OA— authors' backgrounds and disciplines covered carry significantly more weight. This is not surprising. After all, librarians' primary roles have always been to serve the needs of their communities, which include faculty (i.e., teaching staff and researchers) and students attending their institutions.

Question 8 in the survey (Figure 30), which asks librarians to identify the main challenges of OA book publishing today, is perhaps the most revealing, as it confirms what many studies have suggested over the years: that various obstacles stand in the way of OA book publishing, and not all are equally applicable to every business model. Although the budget and/or cost issue always tops every list of librarians' concerns—this survey is no exception—many obstacles must be overcome, and many new concerns have emerged. As the respondents' answers to Question 8 suggest, librarians want to see that publishers and facilitators of OA experiment more with new models, that more content published OA is of higher or equal quality as non-OA content, and that more quality publishers and scholars participate to ensure the quality of the content published OA. Likewise, they also remind us that scholarly journals are still a priority when it comes to allocating funding and stretching tight budgets. Lastly, librarians are simply overwhelmed with the sheer task of keeping up. Staying informed about OA initiatives offered to librarians can, indeed, be daunting.

Therefore, the same obstacles to funding OA publishing cited by librarians in previous studies (Chapter 2) continue to this day: Librarians want to support OA monograph publishing largely for the same reason they support OA journal publishing—in principle and because of the belief that knowledge should be freely accessible to all—but to achieve this mission, more funds are needed for collaborative OA initiatives for monographs to survive as much of existing budgets is used on journals and subscription services. Further, while OA content has come a long way in terms of quality and diversity, more such content must be published OA in the future, including established presses and scholars, more testing is needed all around to determine the effectiveness of various OA business models as they relate to monographs and librarians' willingness to finance them via crowdfunding. Lastly, while it is encouraging to see that OA monographs financed are being used in the institutions that finance them, librarians do not see this as the deciding factor. Much stronger incentives of 'local' nature for librarians to participate would be the relevance of disciplines (and their relation to their institutions) and the awareness that they are directly helping to fund their own scholars' publishing endeavors.

Although librarians' roles have multiplied and expanded in recent years, giving them opportunities to be more proactive and to become integral members of the OA ecosystem (as discussed in Chapter 2; *New opportunities for libraries*), librarians' motives to support OA are still rooted in their traditional roles requiring them to first and foremost acquire and manage

knowledge. This is precisely the reason they remind us in this survey that many obstacles stand in the way and have little or nothing to do with how 'good' a new idea is and whether it will survive in the long run. Their roles, although varied, have not been the roles of innovators or pioneers, but they have sometimes been the roles of early adopters and the early majority (those that may not initiate change, but they 'drive' it, or 'carry' it, to that point where it reaches larger audiences—the highest point in Rogers' Diffusion of Innovation curve (Chapter 3; Figure 1)—the point at which a new idea or innovation has reached 'critical mass' and will be largely adopted. The fact that librarians still support OA in principle even when it comes to monographs—and even in the face of the steep cost of publishing them— confirms that many librarians have embraced their roles of both early adopters and the early majority. It is because of their willingness to participate in crowdfunding of OA monographs as early as 2013 that such business models thrive to this day.

CHAPTER 6

CONCLUSION

In the past decade, OA monographs have become a force to be reckoned with in scholarly communications. Although their publishing and dissemination are in the nascent phases of development—particularly in terms of business models and their sustainability—studies show that scholars, publishers, and librarians are aware of the unique value of OA monographs and remain committed to supporting their publishing and experimenting with ways in which it should be financed to ensure long-form scholarship is made available without restriction to scholars worldwide and in a wide range of HSS disciplines. Despite the unique challenges faced by authors and publishers of OA monographs and the early resistance to the idea of migrating scholarly books online, publishing them OA, making them openly available to the masses, and 'protecting' them with one of several Creative Commons licenses that allow users varying degrees of flexibility in how they use, share, adopt, or repurpose OA content, OA monographs are no longer considered the underdog of OA publishing as more authors, publishers, institutions, and organizations participate in various OA initiatives testing the possibilities. Reviewing available literature confirms that a number of studies has been conducted in recent years monitoring the progress of OA monographs and their adoption in scholarly communities and long gone are the days when most OA-related discussions and surveys centered on OA journals and OA articles only.

Although still present—particularly among the Late Majority and Laggards, the two types of 'adopters' in any community (as illustrated by the innovation diffusion theory, which was used as the starting point of the research) most likely to resist innovation and innovative approaches to publishing owing to their loyalty to tradition and insistence on the proof of its effectiveness before committing to a new idea—the early collective resistance associated with OA monographs has subsided. The early fears of scholars and publishers who worried that OA content would not be of the same quality as traditional content because it would not be subjected to the same rigorous process involving peer-review and extensive editing, that faculty's tenure

and reputation might be jeopardized if labeled OA, and that publishers' reputation might be jeopardized for embracing new and emerging business models that implement author fees seem to have been dispelled to a great degree. The evidence of this is the emergence of a large number of initiatives centered on publishing and funding OA monographs. For well over a decade now, initiatives and projects have launched—ranging from those initiated by single institutions focusing on the needs of their communities to those of global dimensions involving large numbers of institutions joining forces for the greater good.

While the current consensus is that no single approach and no single business model for OA monographs will prevail in the near future—as each innovative concept has brought with it unique advantages and disadvantages—this has not prevented libraries and various institutions that finance the publishing of OA monographs to favor certain approaches over others and to remain vocal about their lingering concerns and challenges. In fact, every part of the scholarly ecosystem has remained vocal on the subject of OA monographs: authors, who are increasingly embracing the concept of OA publishing while still insisting on quality control and license control; publishers, who are still married to traditional systems that have made their businesses lucrative for a long time and who are now looking for ways to make OA publishing an integral component of their operations; and, of course, institutions and libraries, who remain the middlemen in the complex process involving many players and whose main concerns still remain budgets, costs, resources, and meeting the needs of those they serve while not straying from the basic principles and values of librarianship.

In this new universe of OA possibilities, approaches to producing, publishing, and disseminating OA monographs continue to multiply, and the library crowdfunding model—which invites libraries to collaborate on an international (rather than national) level and form a global consortium that annually finances the publishing of high-quality monographs—is proving to have staying power. Collaboration-driven initiatives such as Knowledge Unlatched are still going strong eight years since the organization's first pilot in 2013. Hundreds of libraries worldwide continue to participate in its annual crowdfunding campaigns, and they no longer just include the well-funded institutions of the United States, the United Kingdom, Germany, the Netherlands, and Australia, among others, but have also expanded to include supporters from smaller countries and less prosperous regions. Although the emerging markets of the Global

South and those institutions in less affluent parts of the world (e.g., Eastern Europe, Latin America, Africa, parts of Asia) will likely take a while to catch on, great strides have been made by the scholarly community in recent years in raising awareness in those regions and making librarians and scholars aware of the benefits of publishing of OA scholarly books.

This study is an attempt to outline the factors contributing to the sustainability of the library crowdfunding model so that the scholarly community has a better understanding of the institutions that have participated thus far and how best to move forward and ensure that the future participation sees more institutions, more diversity, and more global impact overall. The factors examined here included OA academic e-book usage and how it is spread out across 167 institutions in 32 countries in Europe and a thorough examination of the traits of those institutions, including their world ranking, size, research output, citations impact, international outlook, and commitment to funding specific disciplines relevant in their communities.

Summary

Based on the methods applied in the quantitative research, usage of OA monographs is the strongest in the institutions that generally participate in annual crowdfunding vs. the institutions that do not participate, regardless of their size and location. However, taking a closer look at the most loyal institutions reveals that usage data vary—from the institutions that show above-average usage to those that show below-average usage.

Reliable factors in determining the 'types' of institutions most likely to embrace crowdfunding include the institutions' world ranking, research output, citations impact, and international score. Of these, the most reliable factors are the institutions' overall world ranking and citations impact. The institutions that support crowdfunding, therefore, may be described as follows: they are highly ranked overall by all three world ranking sources (THE, ARWU, and QS), they stand out for their contributions to the global research community, their scholars are cited more than those belonging to non-participating institutions, and they are very committed to maintaining an international learning environment and enrolling large numbers of international students as well as employing international teaching staff and engaging in collaborative projects with institutions in other countries.

The results of the anonymous survey reveal that libraries—as the main funders of OA monographs and the key participants in crowdfunding campaigns—still want to support OA monographs in principle and because of their strong belief in the tenets of the OA movement: to make scholarly knowledge widely and freely available to all users, regardless of their affiliation and location. They do not find local usage to be the determining factor in their decision-making and place greater value on OA initiatives tied to specific disciplines (relevant to their communities) and to supporting specific authors (i.e., scholars affiliated with their institutions). Thus, in the context of what could be defined as 'local' impact, disciplines and scholars important to the local community trump the importance of the local usage of e-books. However, the most challenging obstacle for librarians is the cost of monographs and their institutions' limited budgets. These are the same sentiments shared by librarians in previous surveys on monographs and on OA in general. The desire to support is often there, but the funding isn't. This means that the way to attract the Late Majority and the Laggards to participate is to make the participation in crowdfunding initiatives more affordable and not a one-size-fits all model.

While the results of all three quantitative analyses—usage analytics, institution profiles and the librarian survey—provide valuable insight into the factors that may contribute to the sustainability of the crowdfunding models, both analyses have limitations that future researchers should take into account. First, this study only captures the usage on one platform, JSTOR, and this usage is by no means a reflection of all possible usage of the same titles at the institutions studied. Owing to the open licenses assigned to OA scholarly monographs, users may download OA books and save them for offline reading, or they may share them with other users (both of these activities are perfectly legal in the context of OA and Creative Commons licenses). This study focused only on the usage of 663 OA monographs published OA through KU's annual crowdfunding initiative captured by the JSTOR platform. In addition, usage data is available for a certain time period, which starts on January 1, 2017, and ends on September 30, 2020.

Another limitation relates to the analysis of world rankings. Only those institutions that are ranked by all three sources are included in the analysis of 'ranking' factors (which means that 30 universities included in Part 1 of the analysis, which is focused on usage, are excluded from Part 2 of the analysis, focused on world rankings) as the assumption behind this decision is that if institutions are profiled by all three sources, they show stronger interest in building their

reputations. This, in turn, would yield reliable data, since the same institutions were studied across the board. This, however, does not mean that the institutions not ranked by all three sources do not warrant a closer analysis in the context of OA monographs.

As far as the anonymous survey goes, it is possible that some questions may have been difficult for participants to fully understand (and therefore answer), or they may be open to biased or subjective interpretation. For one, some librarians may be heavily influenced by their experience with OA journals and therefore may share similar views on OA monographs, despite the fact that the two formats are very different and ways in which they are published OA are very different. The same goes for business models. Every business model is unique in its own way, and the survey was designed to invite librarians to answer the eight questions in the context of OA monographs (not journals) and in the context of only one business model: the global library crowdfunding model. Further, as previous studies pointed out, there are real and noticeable cultural differences across Europe in how the publishing of OA monographs has been received and funded, with some receiving significantly more funding to support various OA efforts by institutions, while others allocate small amounts or do not finance OA monographs at all. Librarians from a wide variety of countries were invited to participate in the survey, and their views are likely to be shaped through the prism of their local and national policies, mandates, and efforts. Lastly, a well-known limitation of any anonymous questionnaire is the possibility of some respondents giving highly biased responses based on their personal frustrations rather than fully informed, unbiased observations. To minimize this possibility, the survey included introductory information for the participants explaining the study's goals and objectives.

The issue of biases brings up the limitation of the innovation diffusion theory, which is used as the theoretical framework for the study. While this well-known theory provides a useful starting point for further examination of viewpoints, attitudes, and behaviors, the theory is not without limitations, particularly when assessing the various types of adopters and determining their key motives. To what extent various types of scholars, publishers, and librarians 'adopt' innovation (in this case, crowdfunding OA) also depends on their personal views. However, that isn't the main limitation in the context of innovative approaches to publishing OA monographs. Instead, it is the inability of certain types of institutions to participate in crowdfunding owing to one reason only: cost and funding. In other words, many institutions that may be defined as

belonging to the Late Majority and Laggers—i.e., those not yet contributing to the sustainability of the model in question—are slow to adopt new ways or ideas not because of their personal views but because of the politics of their institutions and the limitations imposed by their institutions. There surely are librarians belonging to institutions that never participated in crowdfunding who are very supportive of the idea of crowdfunding OA academic literature and appreciate the positive impact of the crowdfunding model but who don't have the financial means or local approval to participate.

Recommendations

This study focused on examining some factors that may contribute to the sustainability of the library crowdfunding model, including usage of scholarly books on the individual institution level and the world rankings of institutions in various areas. It also provided current views of librarians on this particular model and their perceptions of what it will take to sustain it, including lowering the cost of monographs, allocating more funding, and showing support for the disciplines and scholars that matter locally. Future studies of the library crowdfunding model should also examine other relevant factors not covered in this study, including, for example, the impact of various Creative Commons licenses. The questions to ask here include: Is there a relationship between the type of open license and the institutions' tendencies to fund OA monograph? Which licenses do librarians want to support the most and why?

Given that the survey reflected the importance of author backgrounds as an important factor contributing to institutions' willingness to support the publishing of OA monographs, more insight should be given into the 'author' relevance and further studies could investigate if the institutions support OA monograph initiatives if they feature the works of their local authors. Likewise, are institutions more likely to support OA monographs if they are published by locally relevant publishers (e.g., those that are based in the same area or university presses tied to the same institutions).

Lastly, since the survey only covered the voices of librarians and not the voices of scholars and publishers on this topic, future studies should investigate the thoughts of those who create and distribute content (not only those who fund it) to determine their views on the library

crowdfunding model and their willingness to contribute content to such initiatives. After all, every part of the scholarly ecosystem contributes to the success of every scholarly publishing model. As vital as librarians are in the ecosystem of the OA movement—particularly in the realm of OA academic books (i.e., monographs) and crowdfunding (i.e., collaborative financing)—without the support from quality scholars and publishers willing to contribute relevant content to be funded, OA monographs remain a scholarly format whose future will remain uncertain and debatable.

REFERENCES

Academic Rankings of World Universities (2021). ARWU website. http://www.shanghairanking.com/aboutarwu.html. Accessed October 1, 2020-April 1, 2021.

Academic Rankings of World Universities (2021). ARWU website: Methodology. http://www.shanghairanking.com/ARWU-Methodology-2020.html. Accessed April 1-15, 2021.

Adema, Janneke (2010). "Overview of Open Access Models for eBooks in the Humanities and Social Sciences." OAPEN project report.

Adema, Janneke (2011). "On crowdfunding Open Access scholarly books." *Open Reflections*. https://openreflections.wordpress.com/2011/08/03/on-crowd-funding-open-access-scholarly-books. Accessed April 9, 2021.

Adema, Janneke (2019). "Towards a Roadmap for Open Access Monographs." Knowledge Exchange Stakeholder Workshop.

Adema, Janneke & Birgit Schmidt (2010). "From Service Providers to Content Providers: New Opportunities for Libraries in Collaborative Open Access Book Publishing." *New Review of Academic Librarianship* 16(S1):28-43.

Adema, Janneke & Eelco Ferwerda (2009). "Open Access for Monographs: The quest for a sustainable model to save the endangered scholarly book." LOGOS 20: 1-4.

Anti-Double Dipping Alliance for transparency in Open Access book publishing formed (2021). Press Release. https://knowledgeunlatched.org/2018/05/knowledge-unlatched-announces-its-fifth-pledging-round-ku-select-2018-2. Accessed April 10, 2021.

Ayris, Paul et al (2014). "Open Access in UCL: A New Paradigm for London's global university in research support." *Australian Academic & Research Libraries* 45(4): 282-295.

Baldock, Clive (2016). "Citations, Open Access and University Rankings." *World University Rankings and the Future of Higher Education*. Eds. Kevin Downing & Fraide A. Ganotice, Jr. IGI Global.

Bailey, Charles W. Jr (2007). "Open Access and Libraries." *Collection Development* 32: 351-383.

Bargheer, Margo et al (2017). "Unlocking the Digital Potential of Scholarly Monographs in 21st Century Research." *LIBER Quarterly* 27(1).

Barnes, Lucy (2018). “Green, Gold, Diamond, Black – what does it all mean?” Open Book Publishers Blog. https://blogs.openbookpublishers.com/green-gold-diamond-black-what-does-it-all-mean. Accessed March 27, 2021.

Beaubien, Sarah, Julie Garrison & Doug Way (2016). “Evaluating an Open Access Publishing Fun at a Comprehensive University.” *Journal of Librarianship and Scholarly Communication* 3(3), eP1204.

Berger, Monica (2017). “Everything You Ever Wanted to Know About Predatory Publishing but Were Afraid to Ask.” City University of New York (CUNY) Academic Works. Publications and Research.

Berkman Center for Internet and Society at Harvard Law School & Knowledge Unlatched (2013). “Open Access and Scholarly Books: Workshop Report.” https://bit.ly/2QGoNNB. Accessed March 14.

Bohannon, John (2016). “Who’s downloading pirated papers? Everyone.” *Science Magazine*. https://www.sciencemag.org/news/2016/04/whos-downloading-pirated-papers-everyone. Accessed April 4, 2021.

Budapest Open Access Initiative (2002). “Read the Budapest Open Access Initiative.” https://www.budapestopenaccessinitiative.org/read. Accessed March 1, 2021.

Bulger, Monica & others (2011). “Reinventing Research?: Information Practices in the Humanities.” A Research Information Network Report.

Bulock, Chris (2018). “Crowdfunding for Open Access.” *Serials Review*.

Bushong, S., Susannah Cleveland & Christopher Cox (2018). “Crowdfunding for Academic Libraries: Indiana Jones Meets Polka.” *The Journal of Academic Librarianship* 44(2): 313-318.

Butticè, Vincenzo et al (2018). “The road to crowdfunding: A review of the extant literature.” In *Creating and Capturing Value through Crowdsourcing*. Eds. A. Tucci et al. Oxford Univ. Pr.

Butler, Deland (2013). “The Dark Side of Publishing.” *Nature* 495(7442): 433-35.

Cheshire, Jim (2014). “Open access monographs: A humanities research perspective.” *Insights* 27(S): 17-20.

Cockerill, M. (2006). “Business models in open access publishing.” In *Open Access: Key strategic, technical and economic aspects*. Ed. Neil Jacobs. Chandos Publishing.

Cond, Anthony (2016). “The University Press and the Academic Book of the Future.” In *The Academic Book of the Future*. Eds. Rebecca Lyons & Samantha J. Rayner. Basingstoke: Palgrave Macmillan.

Click, Amanda B. & Rachel Borchardt (2019). “Library Supported Open Access Funds: Criteria, Impact, and Viability.” *Evidenced Based Library and Information Practice* 14(4).

Collins, Ellen, Caren Milloy & Graham Stone (2013). Guide to Creative Commons for Humanities and Social Science Monograph Authors. Eds. James Baker, Martin Paul Eve & Ernesto Priego. JISC Collections. http://eprints.hud.ac.uk/id/eprint/17828. Accessed March 2, 2021.

Collins, Ellen & Graham Stone. (2014). “Open access monographs and the role of the library.” *Insights* 27(S): 11-16.

Collins, Ellen, Caren Milloy & Graham Stone (2015). “Guide to open access monograph publishing for arts, humanities and social science researchers.” Research report. AHRC/JISC Collections.

Collins, Ellen & Caren Milloy (2016). “OAPEN-UK final report: A five-year study into open access monograph publishing in the humanities and social sciences.” OAPENUK. JISC.

Collins, Ellen & Caren Milloy (2016). “OAPEN-UK matched pairs pilot: Final Report. OAPENUK. JISC.

Coyle, Karen (2003). “The Technology or Rights: Digital Rights Management,” Part 4, under “DRM and the Law” (based on a talk originally given at the Library of Congress, Washington, DC, November 19, 2003), https://www.kcoyle.net/drm_basics4.html. Accessed April 10, 2021.

Creative Commons (2013). “Case Law.” http://wiki.creativecommons.org/licenses/. Accessed March 2, 2021.

Creative Commons (2017). “About the Licenses.” http://creativecommons.org/licenses. Accessed March 2, 2021.

Crossick, Geoffrey. (2016). “Monographs and open access.” *Insights* 29(1): 14-19.

Davies, Michael C.R. et al (2014). “How should we fund open access monographs and what do you think is the most likely way that funding will happen? *Insights* 27(S): 45-50.

Deegan, Marilyn (2017). The Academic Book and the Future Project Report: A Report to the AHRC and the British Library.

Directory of Open Access Books (2021). https://www.doabooks.org. Accessed April 7, 2021.

Economist (2013). “Unreliable Research: Trouble at the Lab.” *The Economist* 409(27). https://www.economist.com/briefing/2013/10/18/trouble-at-the-lab. Accessed April 8, 2021.

Edwards, Caroline (2014). “How can existing open access models work for humanities and social science research.” *Insights* 27(1): 17-24.

Elliott, Michael (2015). “The Future of the Monograph in the Digital Era: A Report to the Andrew W. Mellon Foundation.” *Journal of Electronic Publishing* 18(4).

Emery, Christina et al (2017). “The OA effect: How does open access affect the usage of scholarly books. figshare. Springer Nature White Paper.

Esposito, Joseph (2016). “The Open Access Monograph.” The Scholarly Kitchen. https://scholarlykitchen.sspnet.org/2016/05/10/the-open-access-monograph. Accessed April 5, 20121.

European Science Foundation (2021). Plan S: Making full and immediate Open Access a reality. “What is cOAlition S?” https://www.coalition-s.org/about. Accessed March 2, 2021.

Eve, Martin Paul (2014). “All That Glisters: Investigating Collective Funding Mechanisms for Gold Open Access in Humanities Disciplines.” *Journal of Librarianship and Scholarly Communication* 2(3).

Eve, Martin Paul (2014). *Open Access and the Humanities: Contexts, Controversies and the Future*. Cambridge University Press.

Eve, Martin Paul (2017). “Open Access Publishing Models and How OA Can Work in the Humanities.” *Bulletin of the Association for Information Science and Technology* 43(5).

Eve, Martin Paul (2021). “On open-access books and “double dipping.” Martin Paul Eve blog. https://bit.ly/3eg76MT. Accessed April 18, 2021.

Farrell, William (2019). “Could library book budgets be used to fund open access monographs.” DWLResearch Blog. https://gradschoolreadingroom.blogspot.com/2019/06/could-library-book-budgets-be-used-to.html. Accessed March 1, 2021.

Ferwerda, Eelco (2010). “New models for monographs – open books.” Based on a paper presented at the 33rd UKSG Conference, Edinburgh, April 2010. *Serials* 23(2).

Ferwerda, Eelco (2013). “Open Access in Humanities and Social Sciences.” Presentation given at the 8th Munin Conference on Scholarly Publishing, Tromsø. Norway.

Ferwerda, Eelco, Ronald Snijder & Janneke Adema (2013). “OAPEN-NL: A project exploring Open Access monograph publishing in the Netherlands, Final Report.” OAPEN Foundation.

Ferwerda, Eelco (2014). “Open access monograph business models.” *Insights* 27(S), 35-38.

Ferwerda, Eelco et al (2017). “A landscape study on open access monographs: Policies, funding and publishing in eight European countries.” Knowledge Exchange.

Free Ebook Foundation website (2021). Unglue.It. https://ebookfoundation.org/unglueit.html. Accessed March 10, 2021.

Friend, F. (2011). “Open access business models for research funders and universities.” Knowledge Exchange. https://knowledge-exchange.info/event/oa-business-models. Accessed April 9, 2021.

Gapper, John (2017). “How the music industry came back to life.” *Financial Times*. https://www.ft.com/content/f72b1d2c-1937-11e7-a53d-df09f373be87. Accessed April 7, 2021.

Gatti, Rupert & Marc Mierowsky (2016). “Funding open access monographs: A coalition of libraries and publishers.” *College & Research Libraries News* 77(9).

Grabowsky, Adelia (2015). “The impact of open access on collection development.” *Virginia Libraries* 61(1): 17-22.

Greco, Albert & Robert M. Wharton (2008). “Should University Presses Adopt an Open Access [Electronic Publishing] Business Model for All of Their Scholarly Books?” Proceedings ELPUB 2008 Conference on Electronic Publishing, Toronto, Canada.

Greco, Albert (2015). “Academic libraries and the economics of scholarly publishing in the twenty-first century: Portfolio theory, product differentiation, economic rent, perfect price discrimination, and the cost of prestige.” *Journal of Scholarly Publishing* 47(1): 1-43.

Green, Toby (2017). “We’ve failed. Pirate black open access is trumping green and gold and we must change our approach.” Learned Publishing 30: 325-329.

Grimme, Sarah, et al (2019). “The State of Open Monographs: An analysis of the Open Access monograph landscape and its integration into the digital scholarly network.” Digital Science, Dimensions & Altmetric Report.

Hajjem, Chawki et al (2005). “Open Access to Research Increases Citation Impact.” s.n.

Harnad, Stevan & Tim Brody (2004). “Comparing the Impact of Open Access (OA) vs. Non-OA Articles in the Same Journals.” *D-Lib Magazine* 10(6).

Hagerlid, Jan (2011). “Open Access to Monographs in the Humanities and Social Science.” *Sciecom Info* 1.

Hampson, Crystal (2014). “The Adoption of Open Access Funds Among Canadian Academic Research Libraries, 2008-2012.” *Partnership: The Canadian Journal of Library and Information Practice and Research* 9 (2).

Hellman, E.S. (2011). “Open Access E-Books.” *The No Shelf Required Guide to E-Book Purchasing*. Ed. Sue Polanka. Library Technology Reports. American Library Association.

Hole, Brian et al (2015). “Innovation in Open Access Monographs, Archives, and Journals.” Proceedings of the Charleston Library Conference.

Jensen, Michael (2009). “Scholarly Publishing in the New Era of Scarcity.” Presentation. The Association of American University Presses Annual Meeting. http://www.nap.edu/staff/mjensen/scarcity.html. Accessed April 4, 2021.

JISC (2014). “A national monograph strategy roadmap: Collectively addressing some of the core challenges that confront the provision and support of the scholarly monograph; past, present and future.” JISC Reports. https://www.jisc.ac.uk/reports/a-national-monograph-strategy-roadmap. Accessed April 4, 2021.

Johnson, Peggy (2009). “Developing Collections.” In *Fundamentals of Collection Development and Management*. 2nd. American Library Association. 112-113.

JSTOR (2021). JSTOR website. https://www.jstor.org. Accessed April 11, 2021.

Jubb, Michael (2017). Academic Books and Their Futures: A Report to the AHRC and the British Library. https://academicbookfuture.files.wordpress.com/2017/06/academic-books-and-their-futures_jubb1.pdf. Accessed April 5, 2021.

Keele, Benjamin & Jere D. Odell (2016). “Managing Digital Rights in Open Access Works. In *Digital Rights Management: The Librarian’s Guide*. Eds. Catherine A. Lemmer & Carla P. Wale. Rowman & Littlefield.

Kennison, Rebecca, Sarah I. Shreeves & Stevan Harnad (2013). “Point & Counterpoint: The Purpose of Institutional Repositories: Green OA or Beyond? *Journal of Librarianship and Scholarly Communication* 1(4): eP1105.

Kickstarter (2021). Kickstarter website, About Us page. https://www.kickstarter.com/about?ref=global-footer. Accessed April 9, 2021.

Kim, Jihyn (2010). “Faculty Self-Archiving: Motivations and Barriers.” *Journal of the American Society for Information Science and Technology* 61(9): 1909-22.

Kingsley, Danny A. (2015). “Open Access: The Whipping Boy for Problems in Scholarly Publishing.” Communications of the Association for Information Systems 37. Article 14.

Knowledge Unlatched (2021). Knowledge Unlatched web site. www.knowledeunlatched.org. Accessed April 1, 2021.

Lamani, M.B., R.R. Patil & B.D. Kumbar (2018). “Open Access E-books in Social Science: A Case Study of Directory of Open Access Books.” *DESIDOC Journal of Library & Information Technology* 38(2): 141-144.

Language Science Press (2021). Language Science Press website https://langsci-press.org/vision. Accessed April 1, 2021.

Lara, Kate (2015). “The library’s role in the management and funding of open access publishing. *Learned Publishing* 28(1): 4-8.

Leach-Murray, Susan (2017). “Knowledge Unlatched—Free Access to Scholarly Content for Every Reader Across the World.” *Technical Services Quarterly* 34(2): 219-221.

Look, Hugh & Frances Pinter (2010). “Open Access and Humanities and Social Science Monograph Publishing.” *New Review of Academic Librarianship* 16(S1): 90-97.

Lucraft, Mithu (2018). “The benefits of open access books are clear but challenges around funding remain.” Impact of Social Sciences Blog. https://blogs.lse.ac.uk/impactofsocialsciences/2018/05/02/the-benefits-of-open-access-books-are-clear-but-challenges-around-funding-remain/. Accessed March 20, 2021.

MacVaugh, Jason & Francesco Schiavone (2010). “Limits to the diffusion of innovation: A literature review and integrative model.” European Journal of Innovation Management 13(2): 197-221.

Maricevic, Maja (2016). “National Libraries and Academic Books of the Future.” In *The Academic Book of the Future*. Eds. Rebecca Lyons & Samantha J. Rayner. Basingstoke: Palgrave Macmillan.

Maxwell, J.M. et al (2017). “Reassembling scholarly communications: An evaluation of the Andrew M. Mellon Foundation’s monograph initiative.” Final report. The *Journal of Electronic Publishing* 20(1).

Maron, Nancy et al (2016). “The Costs of Publishing Monographs: Toward a Transparent Methodology.” *The Journal of Electronic Publishing* 19(1).

McCall, Jenny & Amy Bourke0Waite (2016). “The Academic Book of the Future and the Need to Break Boundaries.” In *The Academic Book of the Future*. Eds. Rebecca Lyons & Samantha J. Rayner. Basingstoke: Palgrave Macmillan.

McCollough, Aaron (2017). “Does It Make a Sound: Are Open Access Monographs Discoverable in Library Catalogs?” *Libraries and the Academy* 17(1): 179-194.

Mole, Tom (2016). “The Academic Book as Socially-Embedded Media Artefact.” In *The Academic Book of the Future*. Eds. Rebecca Lyons & Samantha J. Rayner. Basingstoke: Palgrave Macmillan.

Mongeau, Philippe (2018). “The Future is Open?: An Overview of Open Access Monograph Publishing.” *The iJournal: Graduate Student Journal of the Faculty of Information* 3(2).

Monson, Jane Wendy Highby & Bette Rathe (2014). ”Library Involvement in Faculty Publication Funds, College & Undergraduate Libraries.” *Scholarly Communication* 21(3-4): 308-329.

Montgomery, Lucy (2013). “Metrics Challenges for Monographs.” Knowledge Unlatched. https://eprints.qut.edu.au/68077/.

Montgomery, Lucy (2014). “Knowledge Unlatched: A global library consortium model for funding open access scholarly books; Full report on the proof of concept pilot 2014.” Queensland University of Technology.

Mosterd, Max & Nina Weisweiler (2020). “How Can I Best Interpret Knowledge Unlatched Usage Reports and Metrics?” Open Research Community website. https://openresearch.community/posts/how-can-i-best-interpret-knowledge-unlatched-usage-reports-and-metrics?room_id=technical-support-topics. Accessed April 11, 2021.

Mudrak, Ben (NA). “Creative Commons Licenses: An Introduction for Researchers.” AJE Scholar. American Journal Experts. https://www.aje.com/arc/creative-commons-intro/. Accessed March 20, 2021.

Mullins, J.L. et al (2012). “Library Publishing Services: Strategies for Success. Final research report.” Washington, DC: SPARC.

Nariani, Rajiv & Leila Fernandez (2012). “Open Access Publishing: What Authors Want.” *College & Research Libraries* 73(2): 182-95.

Nature Publishing Group (2015). Author Insights 2015 survey. figshare. Dataset. https://doi.org/10.6084/m9.figshare.1425362.v7.

Neylon, Cameron et al (2018). “Visibility of Open Access Monographs in a European Context: A report prepared by Knowledge Unlatched Research.”

Neylon, Cameron et al (2019). “Open scholarship and the need for collective action.” Copyright, Fair Use, *Scholarly Communication* 128.

O’Neil, Jill (2016). “Monographs, Transparency and Open Access.” The Scholarly Kitchen. https://scholarlykitchen.sspnet.org/2016/12/05/monographs-transparency-and-open-access. Accessed April 5, 2021.

Open Library of the Humanities (NA). A Better Path to Open Access for the Humanities.” Open Library of the Humanities. https://www.openlibhums.org/media/files/olh_prospectus.pdf. Accessed April 2, 2021.

Pinfield, Stephen (2015). “Making Open Access work.” *Online Information Review* 35(5): 604-636.

Pinfield, Stephen & Christine Middleton (2016). “Researchers’ adoption of an institutional central fund for open-access article-processing charges: A case study using innovation diffusion theory.” *SAGE Open* 6(1).

Pinfield, Stephen et al (2021). *Open Access in Theory and Practice: The Theory-Practice Relationship and Openness*. “Critical Studies on Open Access” Series. Taylor & Francis.

Pinter, Frances (2012). “Open Access for Scholarly Books?” *Pub Res Q* 28: 183-191.

Pinter, Frances & Lucy Montgomery (2012). “Knowledge Unlatched: Toward an Open and Networked Future for Academic Publishing.” Proceedings from the Charleston Library Conference.

Pinter, Frances (2016). “The Academic ‘Book’ of the Future and Its Function.” In *The Academic Book of the Future*. Eds. Rebecca Lyons & Samantha J. Rayner. Basingstoke: Palgrave Macmillan.

Posner, Miriam (2013). “No Half Measures: Overcoming Common Challenges to Doing Digital Humanities in the Library.” *Journal of Library Administration* 53: 43-52.

QS World University Rankings (2021). QS website. https://www.topuniversities.com/university-rankings/world-university-rankings/2021. Accessed October 1, 2020-April 1, 2021.

QS World University Rankings (2021). QS website: Methodology: https://www.topuniversities.com/qs-world-university-rankings/methodology. Accessed April 1-15, 2021.

QS World University Rankings (2021). QS website: Subject Methodology. https://www.topuniversities.com/subject-rankings/methodology. Accessed April 1-15, 2021.

Reinsfelder, Thomas & Caitlin A. Pike (2018). “Using Library Funds to Support Open Access Publishing through Crowdfunding: Going Beyond Article Processing Charges.” *Collection Management* 43: 1-12.

Reveal Digital (2021). “How It Works.” Reveal Digital website. http://revealdigital.com/how-it-works. Accessed March 11, 2021.

Riley-Huff, Debra A. et al (2016). “Crowdfunding in libraries, archives and museums.” *The Bottom Line* 29(2): 67-85.

Rittman, Martyn (2018). “Sustainability in Publishing: An Open Access Publisher’s View.” ELPUB 2018, Jun 2018, Toronto. 10.4000/proceedings.elpub.2018.9.

Roach, A.K. & J. Gainer (2013). “On Open Access to Research: The Green, the Gold, and the Public Good.” *Journal of Adolescent & Adult Literacy* 56(7): 530-534.

Rogers, Everett M. (1995). *Diffusion of Innovation*, 5th edition. Simon & Schuster.

Rončević, Mirela (2020). “Digital Rights Management and Books.” American Library Association. *Library Technology Reports* 56(1).

Schmidt, Krista D., Pongracz Sennyey & Timothy V. Carstens (2005). “New Roles for a Changing Environment: Implications of Open Access for Libraries.” *College & Research Libraries* 66(5): 408-409.

Schöpfel, Joachim (2015). “Open Access – The rise and fall of a community-driven model of scientific communication.” Association of Learned and Professional Society Publishers. *Learned Publishing* 28(4).

Sigal, Ari (2017). “Unglue.it, an e-books site that functions like a true participatory democracy.” No Shelf Required. http://www.noshelfrequired.com/unglue-it-an-ebooks-site-that-functions-as-a-true-participatory-democracy. Accessed March 20, 2021.

Singer, Leif (2019). “On the Diffusion of Innovations: How New Ideas Are Spread.” Dr. Leif Singer blog. *Exploring how developers can work together better*. https://leif.me/on-the-diffusion-of-innovations-how-new-ideas-spread. Accessed April 16, 2021.

Smyth, Neil (2016). “Strategic Engagement and Librarians.” In *The Academic Book of the Future*. Eds. Rebecca Lyons & Samantha J. Rayner. Basingstoke: Palgrave Macmillan.

Snijder, Ronald (2010). “The profits of free books: An experiment to measure the impact of open access publishing.” *Learned Publishing* 23(4).

Snijder, Ronald (2013). “A higher impact for open access monographs: Disseminating through OAPEN and DOAB at AUP.” *Insights* 26(1): 55-59.

Snijder, Ronald (2015). “Better Sharing Through Licenses? Measuring the Influence of Creative Commons Licenses on the Usage of Open Access Monographs.” *Journal of Librarianship and Scholarly Communication* 3(1): eP1187.

Snijder, Ronald (2019). *The deliverance of open access books: Examining usage and dissemination*. Leiden Univ. Pr.

Speicher, Lara et al (2018). “OPERAS White Paper Open Access Business Models.” *Copyright, Fair Use, Scholarly Communication, etc.* 89. http://digitalcommons.unl.edu/scholcom/89.

Startups.com Team (2018). “A Brief History of Crowdfunding.” https://www.startups.com/library/expert-advice/history-of-crowdfunding. Accessed April 16, 2021.

Stern, Niels, Eelco Ferwerda & Frances Pinter (2017). “Open Access and Monographs: Policies, Funding and Publishing in Eight European Countries.” 12th Munin Conference on Scholarly Publishing, 22-23, November 2017, Tromsø, Norway.

Stone, Graham & Mafalda Marques (2018). “Knowledge Exchange Survey on Open Access Monographs.” Knowledge Exchange Task & Finish group of OA monographs.

Suber, Peter (2012). *Open Access*. “Essential Knowledge” series. MIT Press.

Svensson, Aina & Jörgen Eriksson (2013). “Monographs and Open Access.” *Sciecom* Info 1.

Swan, Alma (2010). “The Open Access Citation Advantage: Studies and Results to Date.” University of Southampton. IR Research.

Tenopir, Carol et al (2017). “Imagining a gold open access future: Attitudes, behaviors, and funding scenarios among authors of academic scholarship.” *College & Research Libraries* 78(6): 824-843.

Teplitzky, Samantha & Margaret Phillips (2016). “Evaluating the Impact of Open Access at Berkeley: Results from the 2015 Survey of Berkeley Research Impact Initiative (BRII) Funding Recipients.” *College & Research Libraries* 77(5): 568-581.

THE Times Higher Education World University Rankings (2021). THE website. https://www.timeshighereducation.com/world-university-rankings; Accessed April 1-15, 2021.

THE Times Higher Education World University Rankings (2021). THE website: Methodology. https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2021-methodology. Accessed October 1, 2020-April 1, 2021.

Thomson, J. Wolf (2002). “The Death of the Scholarly Monograph in the Humanities.” *Citation Patters in Literary Scholarship, Libri* 52: 121-36.

Tondi, Francesca (2017). “Alternative Publishing Models in a Changing Cultural Landscape: The Rise of Crowdfunding.” *LOGOS* 28(4).

Tsuji, Keita (2018). “Statistics on Open Access Books Available through the Directory of Open Access Books.” *International Journal of Academic Library and Information Science* 6(4): 86-100.

University of Cambridge (2021). “OA monograph costs.” University of Cambridge website. https://osc.cam.ac.uk/monographs/open-access-and-monographs/oa-monograph-costs. Accessed April 4, 2021.

Vidal, Javier & Camino Ferreira (2020). “Universities Under Pressure: The Impact of International University Rankings.” *Journal of New Approaches in Educational Research* 9(2).

Watkinson, Charles (2017). “Mapping the Free Ebook Supply Chain: Final Report to the Andrew W. Mellon Foundation.” Deep Blue: University of Michigan’s Institutional Repository. https://bit.ly/3ndZLli. Accessed April 7, 2021.

Willinsky, John (2009). *The Access Principle: The Case for Open Access to Research*. MIT Press.

Xia, Jingfeng & Katie Nakanishi (2012). “Self-selection and the citation advantage of Open Access articles.” *Online Information Review* 36(1): 40-51.

Mirela Rončević

Biography

Mirela Rončević is a professional writer, editor, and consultant to publishers and libraries, particularly in the realm of digital content, open access, open science, and open virtual libraries. Over the course of her long and international career, she has been affiliated with and collaborated with a wide-range of organizations (e.g., Elsevier, EBSCO, American Library Association) and is a frequent speaker at book fairs and library conferences worldwide. She is also director of No Shelf Required, a web portal on all aspects of digital content and publishing, as well as the author of countless academic and professional articles, journals, monographs, reviews and columns published in a variety of highly-regarded publications (e.g., *Library Journal*, *American Libraries Magazine*, *Publishers Weekly*, *Information Today*). She graduated from New York University in 1997 with a major in journalism and German literature and received her Master of Arts degree from New York University in 2000. She received her Ph.D. in Information and Communications Sciences from the University of Zagreb, Faculty of Humanities and Social Sciences, in 2021.

PUBLISHED WORK

- Article (academic): *Librarians' perceptions and motivations for supporting collaborative models for Open Access monographs* (Common Places; MIT Press, 2021)
- Article (professional): Rethinking the Role of an Open Library (*American Libraries Magazine*, 2021)
- Book (academic and professional): *No Shelf Required 3: A New Era for E-Books and Digital Content* (ALA Publishing, 2021)
- Book (academic): *Digital Rights Management* (ALA Publishing, Winter, 2020)
- Book (professional): *One Country One Library* (ALA Publishing, Fall¸ 2020)
- Article (professional): *Making Digital Resources Accessible for Students with Disabilities* (NSR, www.noshelfrequired.com, 2020)

- Article (professional): *Open Educational Resources: The Story of Change and Evolving Perceptions* (NSR, www.noshelfrequired.com, 2020)
- Article (academic): *The Elusive Art of Book Reviewing and Its Influence* (NSR, www.noshelfrequired.com, 2019)
- Article (professional): *Demand Driven Acquisitions: Do Libraries Get What They Want?* (NSR, www.noshelfrequired.com, 2017)
- Article (professional): *E-book Collections: What's the Deal with Big Deals?* (NSR, www.noshelfrequired.com, 2017)
- Journal (academic): *eContent Quarterly* journal (ALA Editions, June 2013-December 2015)
- Book (professional): *Library Journal* Guide to Electronic Resources (Neil-Schuman, 2009)
- Report (professional): *E-book Platforms for Libraries* (ALA Editions, 2012)
- Book Reviews (professional), *Library Journal*, *Publishers Weekly* (1998–2010)
- Book series (professional), *"Advances in Library and Information Science"* (IGI Global**)**
- Short stories (creative/trade); mirelaroncevic.com

PUBLIC SPEAKING/PANELS

- Host/moderator of webinars on open access and open science (Ongoing)
- TED Talk Speaker, Zagreb, Croatia, "One Country One Library" (2019)
- Instructor of online course: E-books: What Librarians Need to Know Now and for the Future, American Library Association (2014 – 2018)
- Instructor and moderator, ALA (series of) webinars and online workshops on e-books. Understanding E-Books: A Guide to Current Challenges and Future Possibilities (2016–2018)

Mirela Rončević

Životopis

Mirela Rončević je profesionalni pisac, urednik i konzultat nakladnicima sa dugogodišnjim iskustvom u izdavaštvu i knjižnicama, posebno u području digitalnih sadržaja, otvorenog pristupa knjigama, otvorene znanosti i otvorenih virtualnih knjižnica. Surađivala je sa brojnim svjetskim organizacijama (npr. Elsevier, EBSCO, American Library Association) i česti je govornik i moderator na svjetskim sajmovima knjiga i knjižničarskim konferencijama. Direktor je portala *No Shelf Required* koji se bavi svim aspektima digitalnog sadržaja i globalnog izdavaštva kao i autor brojnih znanstvenih i članaka, časopisa, monografija, recenzija i kolumni objavljenih u uglednim publikacijama (npr. *Library Journal, American Libraries Magazine, Publishers Weekly, Information Today*). Diplomirala je novinarstvo i njemačku književnost na New York University 1997. godine a magistrirala interdisciplinarni pristup humanističkim znanostima (s fokusom na književnost) na New York University 2000. godine. Doktorirala je informacijske i komunikacijske znanosti na Sveučilištu u Zagrebu 2021. godine.

OBJAVLJENI RADOVI

- Članak (znanstveni): *Librarians' perceptions and motivations for supporting collaborative models for Open Access monographs* (Common Places; MIT Press, 2021)
- Članak (stručni): *Rethinking the Role of an Open Library* (American Libraries Magazine, 2021)
- Knjiga (znanstvena) : *No Shelf Required 3: A New Era for E-Books and Digital Content* (ALA Publishing, Summer, 2021)
- Knjiga (znanstvena): *Digital Rights Management* (ALA Publishing, Winter 2020)
- Knjiga (stručna): *One Country One Library* (ALA Publishing, Fall¸ 2020)

- Članak (stručni): *Making Digital Resources Accessible for Students with Disabilities* (2020)
- Članak (stručni): *Open Educational Resources: The Story of Change and Evolving Perceptions* (2020)
- Članak (znanstveni): *The Elusive Art of Book Reviewing and Its Influence* (2019)
- Članak (stručni): *Demand Driven Acquisitions: Do Libraries Get What They Want?* (2017)
- Članak (stručni): *Ebook Collections: What's the Deal with Big Deals?* (2017)
- Časopis (znanstveni): *eContent Quarterly* journal (ALA Editions, June 2013-December 2015)
- Knjiga (stručna): *Library Journal* Guide to Electronic Resources (Neil-Schuman, 2009)
- Knjiga (stručna): *E-book Platforms for Libraries* (ALA Editions, 2012)
- Književne recenzije: *Library Journal*, *Publishers Weekly* (1998-2010); *primjeri*
- Serija knjiga (stručna). "Advances in Library and Information Science" (IGI Global**)**
- Kratke priče (kreativno); mirelaroncevic.com

JAVNI GOVORI/PANELI

- Moderator webinar-a o otvorenom pristupu i otvorenoj znanosti
- TED Talk govornik, Zagreb, Hrvatska, **"**One Country One Library" (2019)
- Instruktor online tečajeva E-books: What Librarians Need to Know Now and for the Future, American Library Association (2014 – 2018)
- Instruktor**,** *ALA (niz) webinar-i i mrežne radionice o e-knjigama***.** Understanding E-Books: A Guide to Current Challenges and Future Possibilities *(2016–2018)*