



The
University
Of
Sheffield.

Information
School

INF6000 Dissertation COVER SHEET (TURNITIN)

Registration Number	160105269		
Family Name	Zuntriana	First Name	Ari

Use of unfair means. It is the student's responsibility to ensure no aspect of their work is plagiarised or the result of other unfair means. The University's and Information School's advice on unfair means can be found in your Student Handbook, available via <http://www.sheffield.ac.uk/is/current>

Assessment Word Count 14,538

If your dissertation has a word count that is outside the range 10,000 – 15,000 words or if you do not state the word count then a deduction of 3 marks will be applied

Late submission. A dissertation submitted after 10am on the stated submission date will result in a deduction of 5% of the mark awarded for each working day after the submission date/time up to a maximum of 5 working days, where 'working day' includes Monday to Friday (excluding public holidays) and runs from 10am to 10am. A dissertation submitted after the maximum period will receive zero marks.

Ethics documentation should be included in the Appendix if your dissertation has been judged to be Low Risk or High Risk. ☐ (Please tick the box if you have included the documentation)

A deduction of 3 marks will be applied for a dissertation if the required ethics documentation is not included in the appendix; and the same deduction will be applied if your research data has not been available for inspection when required.

The deduction procedures are detailed in the INF6000 Module Outline and Dissertation Handbook.

ADVOCATING FOR OPEN ACCESS: OPEN ACCESS ADVOCACY
PRACTICES IN INDONESIAN HIGHER EDUCATION INSTITUTIONS
AND THEIR IMPACTS ON THE SUSTAINABILITY OF
INSTITUTIONAL REPOSITORIES

A study submitted in partial fulfilment
of the requirements for the degree of
MA Librarianship

at

THE UNIVERSITY OF SHEFFIELD

by

ARI ZUNTRIANA

September 2017

Abstract

Background

The adoption of open access institutional repositories (OAIRs) in Indonesia is considered slow despite the fact that the open access (OA) movement has been widespread among higher education institutions (HEIs). There have also been several issues related to their sustainability and the wide practice of restricting public access to the repositories' collections. It appears that OA advocates experience difficulties in ensuring the sustainability of institutional repositories (IRs) and gaining support from the university management. Several universities, however, seem to have developed more established IRs. Thus, understanding their approaches to advocating IR would be useful for other institutions in terms of improving their advocacy practices. Nevertheless, literature searches demonstrated that there are limited studies focusing on the key factors for effective advocacy and their implication in the sustainability of OAIRs.

Aims

This study aims to examine the key characteristics of OA advocacy practices in Indonesian universities and their impacts on the sustainability of IRs.

Methods

This research used semi-structured interviews to gain participants' perspectives on OA advocacy programmes and their implications to IRs' sustainability. Thematic analysis was adopted to analyse the data sets in order to achieve the final results.

Results

It was found that there were three main factors of OA advocacy that have contributed to the IR development in the four institutions involved in the study, namely: the combination of top-down and bottom-up approaches in the advocacy process; the addition of wider benefits of OA in the advocacy messages; and the use of library support services, which include mediated deposit and IR training sessions. These factors have been effective in raising students' participation in IR, reducing users' time and resources to access recently published items, and helping the libraries to gain continuous funding for IRs and improving their public image. However, there was a very low impact of the advocacy

practices on the academics' behaviour toward self-archiving. Misconceptions over OA were found to be the major barrier in advocating OAIRs.

Conclusions

It was found that the institutions included in this study were still operating at the lower level of sustainability. Therefore, more work needs to be done to improve the IRs' services and to gain more support from the university management and academics. Further improvement could be achieved by improving the partnership between librarians and academic researchers to resolve the perceived barriers to advocating and sustaining OAIRs.

Acknowledgement

I would like to thank to the following individuals and organisation for their contribution in this project:

My supervisor, Stephen Pinfield, for his support, advice, and encouragement he has provided throughout my time as his student.

My participants who have taken part in this research.

My sponsor, The Ministry of Religious Affairs of Indonesia, for the scholarship.

My mother, for her support, love, and understanding.

My late father whom I lost while I was pursuing my MA course, for his love and endless faith in me, *"You will forever be missed"*.

My brother and sister, who are always supportive.

And my housemates and friends in Sheffield and in Indonesia for their support and company during the ups and downs of my MA journey.

Table of Contents

Abstract	2
Background.....	2
Aims	2
Methods	2
Results	2
Conclusions.....	3
Acknowledgement.....	4
Table of Contents	5
Chapter 1: Introduction.....	7
1.1 Background to research.....	7
1.2 Research aim and objectives	9
Chapter 2: Literature Review	10
2.1 The definitions of open access advocacy and the sustainability of IRs	10
2.2 Institutional open access mandates	12
2.3 The three pillars of sustainability	13
2.4 Diffusion of innovation in institutional repositories implementation.....	14
2.5 Open access institutional repositories in the Indonesian context	15
Chapter 3: Methodology	17
3.1. General approach	17
3.2. The approach to sampling	17
3.3. In-depth, semi-structured interviews.....	19
3.4. Data analysis	20
3.5. Pilot study.....	21
3.6. Ethical aspects	21
3.7. Limitations of the study.....	22
Chapter 4: Results	23
4.1. Sustainability in the context of open access institutional repositories.....	23
4.2. Open access advocacy: the bottom-up approach	24
4.3. Main messages of the advocacy.....	26
4.4. Key factors to implementing open access institutional repositories	29
4.3.1. Institutional open access mandates.....	29
4.3.2. Library-mediated deposit.....	30
4.3.3. Library training sessions for students and academics.....	31
4.5. The actors involved in the advocacy programme.....	32

4.6.	Social sustainability of open access institutional repositories	33
4.7.	Measuring the economic sustainability of open access institutional repositories.....	35
4.8.	Misconceptions as barriers to advocating open access institutional repositories	36
Chapter 5: Discussion		38
5.1.	The meaning of sustainability in open access institutional repositories.....	38
5.2.	Key characteristics of the effective advocacy strategies carried out in Indonesian HEIs	39
5.2.1.	Open access advocacy: a combination of bottom-up and top-down approaches.....	39
5.2.2.	Widening the benefits of open access institutional repositories.....	40
5.3.	Key actors of the advocacy: academic librarians and staff members as change agents and change aides.....	41
5.4.	The impacts of effective OA advocacy on the sustainability of an IR.....	42
5.4.1.	The social sustainability of open access institutional repositories	42
5.4.2.	Economic sustainability of open access institutional repositories.....	43
5.5.	Barriers in advocating for sustainable open access institutional repositories	45
Chapter 6: Conclusion and Recommendation.....		47
6.1.	Meeting research questions and objectives.....	47
6.1.1	Main findings with regard to the research questions	47
6.2.	Recommendations for OA advocates	48
6.3.	Suggestions for further research	49
References.....		50
Appendices		57
Appendix 1: Interview schedule for participants		57
Appendix 2: Examples of coding.....		58
Appendix 3: Consent form for participants.....		61
Appendix 4: Confirmation of ethics approval.....		62

Chapter 1: Introduction

‘[...] the largest obstacle to OA is misunderstanding. The largest cause of misunderstanding is lack of familiarity, and the largest cause of unfamiliarity is preoccupation.’

Peter Suber, *Open Access*, p. x

1.1 Background to research

Open access (OA) has been increasingly adopted in many higher education institutions (HEIs) throughout the world, including those in the developing nations. The ubiquity of the Internet and the altruistic motivation of sharing publicly funded research have been argued as two crucial factors of this development (Parsons, 2017). OA proponents have been using both aspects to actively support the initiative through so-called ‘OA advocacy’. It is one of the primary strategies used to promote barrier-free access among stakeholders at various organisational levels. It mainly focuses on ‘creating an evidence base for the benefits of OA, and making the case to policymakers, funders and research managers’ (Swan, 2012, p. 42).

In HEIs, the aim of advocacy is to improve the ways in which an institutional repository (IR) can be effectively developed and made sustainable in terms of varied aspects. It may include contents, IT infrastructure support and funding resources. An OA advocacy strategy can take various forms depending on the stages of OA adoption and organisational culture of an institution. Administrative preference and research climate in the university may also affect the implementation of OA (Price, Engelson, Vance, Richardson, & Henry, 2016).

In order to achieve a successful advocacy project, OA advocates primarily aim to target several key stakeholders including policy makers, researchers and students (Swan, 2012). As these audiences have their distinctive characteristics, it is considerably necessary for OA supporters to employ multiple approaches to achieve a more meaningful user engagement. Different types of challenges in institutions are also likely to influence the result of advocacy programmes. In this case, therefore, a ‘one size fits all’ strategy will not be feasible in advocating OA repositories (Jones, 2006).

Gaining support is crucial in an OA adoption context. According to Cullen and Chawner (2010), the sustainability of OA institutional repositories (OAIRs) is determined by the extent to which the advocates are obtaining support from the academic community. On the other hand, despite their

positive views toward OAIRs, many academics in several universities are still reluctant to embrace OA mandates and commit to self-archiving (Wirba Singeh, Abrizah, & Harun Abdul Karim, 2013; Yang & Li, 2015). There seems to be a discrepancy between the acceptance of IR and academics' actual actions in supporting its sustainability. As a result, this situation may lead to sustainability issues, such as zero-growth contents, instability of services, and even the closure of an IR. Callicott (2015, p. 147) suggests that:

open access is still an area of confusion and myth for many faculty members, given the progress since the 2002 Budapest Open Access Initiative, the increasingly advocacy activity by SPARC, and related legislation in California and Illinois. It is clear that despite major steps forward (e.g., funder mandates; federal policy and federal legislative efforts; vocal, high-profile champions; and even a mention on the Colbert Report), open access is still seen as an outlier.

Although the number of IRs has been increasing steadily in the last few years, OA advocacy remains a major issue for many universities in Indonesia. According to the recent literature, it has been found that the majority of IRs are still restricting access to their digital collection. A recent study by Liauw and Genoni (2017) shows that many IRs registered in *OpenDOAR* (Directory of Open Access Repositories) and *ROAR* (Registry of Open Access Repositories) are found to be inaccessible. There have also been some cases where several institutions suspended their OA policy or could no longer sustain their IRs (Priyanto, 2015). Thus, aside from raising users' awareness of OA, another critical challenge for Indonesian academic librarians is 'to develop and maintain sustainable models of OA repositories for users' (Ghosh, 2011, p. 19).

Given the evidence that many universities still have problems with OA promotion and sustainability issues, there should be more studies addressing these topics. However, research into OA advocacy is still limited. This dissertation has been motivated by the interest to examine best practices regarding OAIR advocacy and sustainability as well as to fill the gap in the literature. The findings should make an important contribution to the fields of OAIRs and scholarly communication in Indonesia. This may include a deeper understanding of the significant factors contributing to the success of OA advocacy and how they affect IR sustainability.

1.2 Research aim and objectives

The aim of this dissertation is to investigate strategies and best practices of OA advocacy in Indonesian universities, especially in the context of enhancing the sustainability of IRs. This focus leads to the central research questions of this study:

‘What are the key factors contributing to effective open access advocacy in Indonesian higher education institutions and to what extent does effective open access advocacy contribute to the sustainability of an institutional repository?’

In order to obtain a more comprehensive insight into the roles of different actors in the OA advocacy debate, the perspectives of senior managers, middle managers and staff members toward OAIR advocacy and sustainability will be analysed.

To address the research questions, the objectives of this study are:

1. To analyse the meaning of sustainability of OA institutional repositories;
2. To investigate the key characteristics of the advocacy strategies carried out in Indonesian HEIs;
3. To identify the main actors of OA advocacy in the institutions;
4. To analyse the implications of effective OA advocacy to the sustainability of an IR;
5. To examine barriers to advocating OA institutional repositories.

Chapter 2: Literature Review

In this study, the analysis focuses on OA advocacy and its implications to the sustainability of IR. In this literature review, these two major topics will be highlighted together with other related areas, which include OA mandates, the diffusion of innovation theory, and OAIR implementation in the Indonesian context. These five areas are considered as highly relevant to the research topic as they provide a solid basis for understanding the subjects being investigated.

2.1 The definitions of open access advocacy and the sustainability of IRs

The Budapest Open Access Initiative was the first global manifesto of the OA movement, focusing on OA journal literature. It declares that 'it will use its resources and influence to extend and promote institutional self-archiving [...] and to help an open-access journal system become economically self-sustaining' (BOAI, 2002, para. 7). This suggests that it identifies self-archiving as one of its top strategies for supporting the OA movement and regards economic sustainability as an essential aspect of OA journal publishing. As the IR is considered a relatively recent development in scholarly publishing, there were no initial statements specifically addressing OAIR advocacy.

Numerous definitions of advocacy have been shared by library and information professionals. The researcher, however, decided to use two definitions offered by the Canadian Association of Public Libraries and the Canadian Library Association (CLA). Both definitions are considered relevant for explaining advocacy in the OA context. According to the Canadian Association of Public Libraries, 'advocacy is a planned, deliberate, sustained effort to raise awareness of an issue' (as cited by Ghosh, 2011, p. 19). It is categorised as a bottom-up approach to promoting change in policy. The CLA provides a more specific definition addressing the OA movement. It gives an operational definition of OA advocacy as being to:

raise awareness of library patrons and other key stakeholders about open access, both the concept and the many open access resources, through means appropriate to each library, such as education campaigns and promoting open access resources.
(Morrison & Waller, 2008, pp. 486-487)

The CLA goes on to state the importance of libraries to support gold and green OA and to equip researchers with OA journal publication and funding for publication fees (Morrison & Waller, 2008).

While the CLA statement has mainly described the roles of librarians as OA advocates, it does not specifically address the topic of IR.

Anecdotal evidence suggests that an advocacy project merely needs to be undertaken in the earlier phase of OA adoption. The Canadian Association of Public Libraries, however, points out that advocacy 'is an ongoing process in which support and understanding are built incrementally over an extended period of time and using a wide variety of marketing and public relations tools' (as cited by Ghosh, 2011, p. 19). This indicates that sustainable advocacy programmes are required in order to achieve the long-term sustainability of OAIRs.

The concept of sustainability has not been widely studied in the library and information field despite the fact that this topic is becoming increasingly popular in other disciplines (Chowdhury, 2014; Eschenfelder et al., 2016). Many prior studies on the sustainability of OA publishing also merely focused on the journal publication system and subject repositories with particular attention to their financial aspects (e.g. Rieger, 2011; Costello et al., 2014; Foxall & Nailor, 2016; Hall, Arnold-Garza, Gong, & Shorish, 2016). In this dissertation, the focus will be on IR. This may be defined as an institutional archive that is used to collect, archive and disseminate research outputs generated by universities or research centres (Marsh, 2015).

An insightful New Zealand study examined the sustainability of IRs in terms of academic community acceptance (Cullen & Chawner, 2010). Researchers suggest that the adoption of OA among scholars has been slow in spite of their considerable awareness of the existence of IR and its potential benefits to research dissemination. Another similar study in Malaysia also showed that most authors are not self-archiving enthusiasts, albeit they are likely to agree with the idea of repositories to disseminate knowledge (Wirba Singeh et al., 2013). Some common causes of this phenomenon are low level of awareness (Manjunatha & Thandavamoorthy, 2011; Stanton & Chern, 2011; Yang & Li, 2015), fear of plagiarism and concern about copyright issues (Abrizah, 2009; Wirba Singeh et al., 2013; Mamtora, Yang, & Singh, 2015). A prior study in the US also revealed that academics are often concerned with the copyright issues, technical skills and time spent to learn and use the IR (Kim, 2010). The results of these studies indicate that how promoters are framing IR services is an important element of advocacy strategy (Armstrong, 2014).

A study conducted by researchers in Greece shows that the majority of academics in an educational institute in Athens have given a positive reception to IR and self-archiving (Kyriaki-Manessi, Koulouris, Giannakopoulos, & Zervos, 2013). Nevertheless, no further studies have confirmed whether this is positively correlated with their participation in IR. Other studies investigated the challenges of

adopting IR in small and medium institutions. A study on a smaller university demonstrates that the barrier of developing IRs lies in the lack of funding and staffing (Wu, 2015). Another challenge is the academic nature of these universities, which focus mainly on teaching rather than research (Nykanen, 2011).

Although the number of studies on academics' acceptance of IR has increased within recent years, there is a lack of research on the impacts of OA advocacy on IR sustainability. It appears that there is a gap in the literature about this particular area. Further research, therefore, is urgently needed.

2.2 Institutional open access mandates

Another way to implement OA is to enforce a self-archiving policy through OA mandates. However, a mandate can also be a result of advocacy programmes targeting policy and decision-makers. Mandates are classified as top-down strategies and have been widely adopted in many institutions.

There have been conflicting views and findings in studies on the relationship between OA institutional mandates and IR development. Several authors suggest that the OA mandates can have various positive impacts, such as advancing 'the universal green OA' (Harnad, 2015, p. 133), populating the IR (Anne Kennan, 2011; Gargouri et al., 2012) and increasing the rate of submissions (Gargouri et al., 2012). An earlier study on the effectiveness of institutional mandates in the UK and Germany also showed that there was a correlation between mandates on the service provision and the content growth (Puskas, 2011). It has also been argued that the mandating of OAIR is an instant panacea to deal with the cultural and bureaucratic barriers in an organisation (Pinfield, 2005).

On the other hand, Quinn (2010) suggests that an OA mandate has no substantial impact in reducing the academics' psychological barriers to self-archiving. A study by Zhang, Boock and Wirth (2015) also found that a mandate alone does not improve the academics' behaviour unless there are library support programmes offered. These can include 'a coordinated article identification, request and library-mediated deposit process' (Zhang et al., 2015, p. 2). Several studies also confirmed that the increase of IR contents was mainly driven by librarian-mediated depositing practice rather than the OA mandate (Mackie, 2004; Xia & Sun, 2007; Kamraninia & Abrizah, 2010; Xia et al., 2012). To bridge this disagreement, Stewart (2013, p.1) asserts that both mandates and bottom-up advocacy are needed in helping 'IRs continue to enhance open access content and delivery'.

In the Indonesian context, research by Liauw and Genoni (2017) implicitly showed that national regulation on IR played an important role in strengthening OAIR implementation. However, to date,

studies that specifically investigate the impacts of OA policy on IR implementation in Indonesian universities have not yet been found. This may be because it is a relatively recent area of investigation in the country.

2.3 The three pillars of sustainability

Before examining the three pillars of sustainability, it is important to discuss two meanings of the term 'sustainability' offered by commentators in the scholarly communication field. This is in order to have a clear understanding of the concept and to prioritise the most relevant area for this research.

According to Eschenfelder et al. (2016), sustainability has multifaceted characteristics and does not have a single definition. As a result, as they claim, when it is applied to IRs it can mean different things for different authors. First, sustainability in IRs is defined as 'the continued operation of a collection, service, or organization related to [...] repositories over time and in relation to ongoing challenges' (Eschenfelder et al., 2016, p.1). In other words, it refers to how the level and quality of an IR can be maintained and even improved for the longer term. Second, it might relate to 'the sustainable information' or the ways that information can be created with a responsible use of energy and resources (Chowdhury, 2014). In this case, a sustainable repository can be achieved by committing to strategies that involve 'the three pillars of sustainability', i.e. social sustainability, economic sustainability and environmental sustainability (Chowdhury, 2013).

In the context of IRs, economic sustainability involves the ways a high-quality IR can be developed with reasonable costs (Chowdhury, 2016) and it is used to acquire potential benefits both for the library and its stakeholders. This may also include the reduction of costs for accessing information both in terms of direct and indirect expenses (Chowdhury, 2013). As a non-profit service, there are limited ways for IR managers to generate profit or other forms of direct financial benefits. Therefore, the economic sustainability of IRs is recognised to be a complex aspect to measure.

Social sustainability means that repositories are built based on the users' need so it can potentially save their time and energy in completing tasks (Chowdhury, 2016). This aspect is also much related to the awareness of academics and students toward self-archiving in IRs. Two main issues that may affect the social sustainability of an IR is the embargo period (Chowdhury, 2014) and various levels of OA awareness among academics from different disciplines (e.g. Abrizah, 2009; Covey, 2009; Cullen & Chawner, 2011).

Environmental sustainability in information services is aimed to minimise the costs of energy and environmental resources consumed in the information life cycle (Chowdhury, 2016). For example, Chowdhury (2014) claims that most repositories in UK HEIs have been managed without examining their impacts on the environment. At least three factors need to be considered in establishing environmentally-friendly information services, including the energy cost of manufacturing, the lifetime of the hardware and 'the fraction of the life of the device used in an operation' (ibid., p. 127).

Despite the prior claim made by Eschenfelder on the different interpretation of the term 'sustainability', when analysing both meanings, it appears that they are closely interrelated. Chowdhury, as one of only a few scholars who have studied the sustainability aspects of scholarly communication, suggests that both areas of sustainability often affect one another. To achieve the social sustainability of an IR, for instance, an institution needs to secure continuous funding and invest more in technological infrastructure (Chowdhury, 2014).

From the literature, it is known that studies on the sustainability of IR tend to focus more on either its social aspects (e.g. Abrizah, 2009; Stanton & Chern, 2011; Kyriaki-Manessi et al., 2013; Wirba Singeh et al., 2013) or its economic ones (e.g. Houghton, 2010; Burns, Lana, & Budd, 2013). This may imply that the growth of IRs has been much affected by barriers in both areas. The environmental sustainability of IRs, on the other hand, has not been widely recognised in the library field. The complexity in measuring the environmental impacts of repositories seems to be the major barrier for researchers to conduct comprehensive studies on this particular topic. To gauge the energy consumption of a digital information service, for example, a researcher needs to consider the behaviours toward energy use shown by both the provider and the end users (Chowdhury, 2016).

Considering this difficulty issue, the researcher preferred to focus this project on examining the social and economic sustainability of Indonesian OAIRs.

2.4 Diffusion of innovation in institutional repositories implementation

Open access promoters need to have a good understanding of the best methods to promote the idea to the audiences. The diffusion of innovation theory has been developed to explain the process of adopting innovation in various social systems. According to Rogers (2003), diffusion is the process of communicating an innovation among members of a social system using various methods and channels. He suggests that there are some factors that determine the success of an adoption of an innovation, i.e. 'the relative advantage, compatibility, complexity, trialability, and observability' (Rogers, 2003, p. 16). The theory has been widely used as a conceptual framework to describe the

adoption of new technology, including the IR (e.g. Swanepoel, 2005; Stanton & Chern 2011; Dorner & Revell, 2012; Oguz, 2016).

In the organisational setting, Rogers (2003) identifies three possible types of innovation-decisions according to people who are dominantly in charge: i) optional innovation-decisions, where the decisions of innovation are made independently by an individual in the system; ii) collective innovation-decisions, referring to adoption decisions that are collectively made by members in the system; and iii) authority innovation-decisions, referring to adoption decisions made by top decision-makers.

Rogers (2003) groups the actors of innovation into three broad categories: opinion leaders, change agents, and change aides. Jones (2006) adopts this approach in IR promotion by positioning senior managers as opinion leaders, project staff as change agents, and liaison/subject librarians as change aides. This idealistic outlook is appealing, but the extent to which the strategy works in real practice is still debatable. Case studies in Indonesia and New Zealand found that subject librarians possess different opinions and levels of knowledge about IRs and have not identified themselves as IR advocates (Dorner & Revell, 2012; Priyanto, 2015). However, a study by Lagzian, Abrizah and Wee (2015) on 295 participants in 13 nations, mostly European and North American countries, showed that IR managers perceived a 'people factor' as one of the leading contributors in advancing their IR implementation.

The theory was used in this study to analyse the roles of different actors in OA advocacy and identify the prevailing innovation approach adopted by universities.

2.5 Open access institutional repositories in the Indonesian context

It has been reported that Indonesia has the highest number of IRs among South East Asian countries (Lee-Hwa, Abrizah, & Noorhidawati, 2013). On closer scrutiny of the data, however, its total number of repositories is too low compared to the number of universities. According to the data provided by the Directorate General of Higher Education (Direktorat Jenderal, 2014), currently, there are around 3,000 HEIs in the country. Nevertheless, only 58 repositories are registered in *OpenDOAR*, *ROAR* and *Webometrics*. A study by Liauw and Genoni (2017) reported that several universities had developed more than one repository, and several repositories were still in the trial mode. Thus, 52 units are available for more detailed analysis. It was found that out of this 52 only 14 repositories provided access to all or most parts of their digital collection, while six sites were found to be inactive during the year of study (Liauw & Genoni, 2017).

The Indonesian government has encouraged HEIs to implement IR by issuing several acts. These include the Ministry of National Education Act No. 17 / 2010 and Circular 2050/E/T/2011, which mandates academics and students to archive their research outputs in IRs and in a national portal, which is referred to as Garuda (Garba Rujukan Digital or Digital Reference Portal) (Farida, Tjakraatmadja, Firman, & Basuki, 2015; Liauw & Genoni, 2017). However, a detailed requirement to ensure that IRs will be made OA has not been provided. As a result, the implementation of OAIR differs between institutions. Liauw and Genoni (2017) referred to this as 'a different shade of green'. It is where green OA is implemented differently among universities depending on their needs and preferences toward OA initiatives. The most common practice found is restricting public users from accessing the full-text version of deposits.

Priyanto (2015) has identified two main factors that have impeded the development of OAIRs in Indonesia, namely, librarians' lack of knowledge and confidence in promoting and developing OA and a weak collaboration between librarians and academics. Liauw and Genoni (2017) speculate that, rather than being driven by a generous act toward the OA movement, the main forces of IR development in Indonesia are 'corporate information management, institutional prestige, and the need to combat plagiarism' (p.1). Anecdotal evidence shows that the development of IRs has been driven by the practices in the disciplines of information management and technology (Marsh, 2015). As a result, as March claimed, many repositories have been developed as institutional services displaying research outputs for public users. Citing the results of research by Liauw and Genoni, Poynder (2017) believes that the practices have been common in many universities.

Two salient characteristics that are embedded in OAIRs developed in Indonesia are the types of collections and how they have been presented. Main items are usually electronic theses and dissertations (ETD) written by undergraduate and post-graduate students, followed by academics' articles and teaching materials. The ETD collections are often presented in separate chapters. Liauw and Genoni (2017) suggest that this is a way to compensate the low Internet bandwidth. Wahid (2011), however, claims that the practice is a common trick used by IR managers in Indonesia to elevate the value of the rich file indicator in a Webometrics assessment. This reflects that one of the driving factors of IR development in Indonesian universities is to be able to compete in the Webometrics university ranking. Two prior studies, by Priyanto (2015) and Liauw and Genoni (2017), have confirmed this point.

Chapter 3: Methodology

3.1. General approach

This study adopted qualitative research methods, as the researcher attempted to gain an in-depth understanding of the perspectives of the participants involved in the OA advocacy. The qualitative approach is used to examine subjective experiences and the points of view of participants (Bryman, 2015). Technically, it allows the researcher to interpret the meanings of ‘phenomena (actions, decisions, beliefs, values, etc.)’ found in the datasets (Ritchie & Lewis, 2003, p. 3). The researcher did not consider the use of quantitative research due to the difficulty in finding a large number of participants to study. Furthermore, the research questions that have been asked were also not suitable to be addressed by a quantitative research design. The researcher used thematic analysis to analyse the data. This is where the themes found from the data sets were identified and examined in order to find ‘repeated patterns of meanings’ (Braun & Clarke, 2006, p. 86).

3.2. The approach to sampling

There were three main factors considered when selecting the sample of the study:

- i. The ownership status of the universities (e.g. public universities vs private universities). Anecdotal evidence suggests that this aspect may influence the level of independence in organisational decision-making and the ability to secure funding for IRs.
- ii. The possibility to gain varied perspectives and opinions of library staff coming from different management hierarchies (e.g. top manager, middle managers and staff members).
- iii. The availability of potential participants to be interviewed, specifically those who are experienced in OA promotion and IR management.

Ideally, it might also have been useful to take into account the research settings of the universities (e.g. teaching-focused universities vs research-intensive universities). To date, however, there is no clear categorisation in Indonesian universities. Even though there are several universities that are self-proclaimed research-led institutions, it is unlikely that they have met the requirements of a so-called ‘research-intensive university’ (Soehendro, as cited in Wedhaswary, 2012).

Purposive sampling methods were adopted in order to enable the researcher to interview participants with specific profiles relevant to the research questions (Bryman, 2015). Initially, the researcher intended to recruit participants who had more than a year of experience in managing an IR and considerable knowledge of OA concepts and related fields. However, in practice, it was difficult to stick to this idealistic plan due to several unexpected circumstances, such as the unavailability of participants during the data collection and the change in organisational structure.

A snowball sampling strategy was used to obtain more participants with suitable backgrounds and work experiences. This strategy is commonly used in small group research to identify individuals who have similar profiles with the current participants (Rajamanickam, 2001). In this study, all participants other than top managers were recruited using this sampling technique.

The primary data was collected from interviewing 13 participants involved in OAIR management in four different HEIs in Indonesia. In detail, seven individuals were recruited from two private universities, and six others from public ones. Those four institutions were located in Surabaya, East Java. It has been reported that most of the universities that have developed their OAIRs are located in this province (*OpenDOAR*, n.d.).

Table 1: The gender of the participants

Position	Participants		Notes
	Male	Female	
Top manager	2	2	Three persons were head of libraries cum librarians. One person was a library manager cum an academic researcher
Middle manager	3	-	Two persons were current IT managers and one person was a senior librarian responsible for handling the collection management unit
Staff member	6	1	One person was a former head of the library cum librarian. Five persons were operational staff members

The four universities had a various number of years of OAIR implementation. This variety has benefited the researcher to gain different perspectives on the factors contributing to the success of OA advocacy. However, the total number is counted from the first year of OA being adopted. Thus, it did not involve the years when access to several IRs were restricted for internal users only.

Table 2: Number of years of OAIR implementation

Universities	Years of OAIR implementation		
	10 – 15 years	4 – 9 years	Less than four years
University 1	√		
University 2			√
University 3		√	
University 4			√

3.3. In-depth, semi-structured interviews

The study made use of in-depth and semi-structured interviews with open-ended questions. According to Flick (2014), a semi-structured interview is designed to explore both tacit and explicit knowledge of the participants. This approach was employed as it enabled the researcher to address specific questions while giving a sense of freedom to participants in responding to the queries (Galletta, 2013). This method also allowed the participants to highlight any information that they considered relevant and contribute to answering the research questions (Longhurst, 2009). However, it has been argued that the extent to which a semi-structured interview works heavily relies on the interviewer (Bryman, 2015). Therefore, it was sometimes difficult for the researcher to always keep the conversation relevant to the research inquiries.

In this study, most participants were interviewed face-to-face, individually, using Bahasa Indonesia for about 30 minutes. Interviews mostly took place in the libraries where the participants work. Interviewing participants in their workplaces has its benefits and drawbacks. Technically, this was the easiest way both for the researcher and participants as interviews took place during working hours. Furthermore, this also helped the researcher to be in the research setting where the study was conducted (Longhurst, 2009). However, as Longhurst asserts, it can prevent the participants from giving their actual views about their institutions, which may contain negative judgement. In order to

minimise this risk, the researcher attempted to conduct the interviews in a separated room whenever possible.

There were several changes of plans in the interview process. One participant who happened to be the IT department coordinator in University 1 was hospitalised during the data collection. As a result, the researcher had to replace her with a staff member. The researcher also decided to interview one staff member from University 1 who was also a PhD student in a university outside of Indonesia. There were two main reasons for this decision. First, he was a former head of the library and was highly experienced in OA advocacy. Second, his status as an international student was considered beneficial since it helped him to be more reflective of his prior experience. Moreover, he was one of few librarians who attended the Berlin Declaration and thus he could be seen as a key advocate of OA in Indonesia. This participant preferred to be interviewed via email.

3.4. Data analysis

The thematic analysis is described as ‘a method for identifying, analysing, and reporting patterns (themes) within data’ (Braun & Clarke, 2006, p. 79). Themes are ideas that lie both explicitly and implicitly within the data (Guest, 2012) and the code is a list of themes that captures the phenomenon directly from the raw data (Boyatzis, 1998). The code can be acquired both deductively from the data and inductively from prior studies and theories (Boyatzis, 1998).

The analysis process in this research began with the transcribing of interviews in the original language. This helped the researcher to become familiar with the data and gain initial understandings of ‘their range and diversity’ (Ritchie & Lewis, 2003, p. 8). A major challenge in the transcription process was dealing with the different levels of recording quality and the tempo of interviewees’ speeches. The researcher attempted three times to listen to each recording in order to clarify several unintelligible words and phrases. However, there were a few cases where the researcher did not obtain satisfying results. As a result, several missing words due to inaudibility were left and marked in order to minimise inaccuracies. This was followed by reading and re-reading the transcription several times to acquire ideas for the initial coding. These Indonesian transcripts were then coded using English codes.

Conducting the open coding and searching for relevant themes were regarded as more complicated tasks. In the initial coding, the researcher identified and developed as many codes as possible. The inductive approach was used as the primary method. Nonetheless, it was inevitable that the literature reviews also influenced the researcher in identifying codes. Hundreds of codes were gathered and

grouped according to their similarities. After completing the open coding, the researcher started to develop themes that were significantly representing the codes.

Ideally, there should have been more than one coder employed in the coding process in order to enhance the quality of analysis. Nevertheless, limitations in time and resources did not permit the researcher to involve multiple coders in this project.

3.5. Pilot study

A pilot study is used to test some particular aspects of a research project (Baker, 1994). This can be useful, for example, to refine the interview questions and the ways in which the researcher approaches the participants and the interview process (Yin, 2015). In this study, one pilot interview was performed with a colleague of the researcher and resulted in the decision to reduce the amount of time for real interviews and the use of jargon. No major change was made to the interview questions.

3.6. Ethical aspects

This research project was granted ethical approval by the Information School of the University of Sheffield Ethics Committee and categorised as a low-risk study.

Prior to the data collection, participants were provided with a written and verbal explanation of the project. Informed consents were then delivered and signed by those who agreed to be interviewed. All participants were allowed to withdraw from the interviews at any time.

In order to protect the confidentiality of information, all participants and their institutions were anonymised in the dissertation write-up.

Copies of the research ethics application, ethics approval letter and consent forms can be found in the Appendices.

3.7. Limitations of the study

This research has several limitations:

- i. The sample in this project was very small due to resource and time constraints. Most interviews were conducted during the month of Ramadhan, meaning that there was a reduction in working hours in many institutions in Indonesia.
- ii. The study merely included a small number of universities that have adopted OA. Thus, the results cannot be generalised to all universities.
- iii. This study took two different approaches in interviewing the participants. As previously stated, one participant preferred to be interviewed via email rather than through other more interactive tools, such as Skype or a phone call. As a result, it was impossible to have a synchronous communication, which is much preferable in qualitative data collection.
- iv. As interviews were conducted in the researcher's native language, there might be several meanings of the results that were lost in the translation process. It is arguably a risk that commonly occurs when a qualitative study is conducted in a non-English language but results in an English publication (van Nes, Abma, Jonsson, & Deeg, 2010).

Chapter 4: Results

As mentioned before, OAIR is an emerging area in Indonesia. It was anticipated that this aspect would influence how the repositories have been developed and managed. The types of collection that are usually dominated by thesis and dissertation documents also appeared to affect the way the participants communicated the benefits of IR to the stakeholders. The results suggested that advocacy programmes, institutional OA mandates and library support services were contributing to the sustainability of IRs.

4.1. Sustainability in the context of open access institutional repositories

Participants' limited knowledge on the sustainability concept has posed problems for this researcher during the interview process. It was also observed that a larger number of participants tended to respond to the interview questions with their technical knowledge on IR. Therefore, instead of using the 'sustainability' terminology, the researcher decided to address the topic by asking participants about their library programmes to maintain and develop IRs. It was found that most participants associated the sustainability with two major features: long-term institutional commitment toward OA and continuous improvement programmes.

Several participants reported that the universities' commitment to OA should be maintained in order to develop sustainable IRs. This also included the participants' expectations of academic researchers to actively promote OA and participate in self-archiving:

'I expect the academics to promote the use of IR to their students. Many students don't even know that IR exists' (Participant PA8).

'There were still a few academics who store their articles in IR. We hope that there'll be an increase in their participation when the self-deposit approach is applied' (Participant PA10).

Two participants highlighted the significance of having sustainable OA advocacy programmes to respond to the change in organisational structure:

'We need to develop more sustainable advocacy programmes to anticipate the change in leadership roles. We must ensure that this kind of situation won't affect the OAIR implementation' (Participant PA1).

‘There were several times when we approached the OA inconsistently. Change in the university leadership often resulted in the change of policy and it ruined our system, really [...] Therefore, I very much expect the university’s commitment to maintain OA adoption’
(Participant PA11).

Pursuing the continuous improvement of IR was also mentioned as another primary priority to support its sustainability. Several participants, especially from top and middle management, reported that they had developed short- and long-term development plans for their repositories. These included increasing the number of deposits, implementing the self-deposit approach and improving the IT systems:

‘Our next target is simply to increase the volume of items and to balance the number of each type of deposits’ (Participant PA2).

‘We were thinking of developing the self-deposit system and delivering training sessions to prepare users (to adopt the new approach)’ (Participant PA8).

‘We’ll experiment with the mobile version [of IR]’ (Participant PA11).

Participant PA4 also highlighted the need for the library to continuously improve its IR system due to unidentified potential problems in the IT governance.

4.2. Open access advocacy: the bottom-up approach

The OAIR was frequently described by the interviewees as the result of a bottom-up advocacy strategy. The advocacy was usually started by communicating the benefits of OAIR to the stakeholders prior to the implementation. Most participants mentioned the university boards, faculties’ and departments’ senior staff members and academic researchers as key audiences for their advocacy programmes. Both formal and informal approaches were used during the process, as the comments below illustrate:

‘We introduced the idea of OA and digitisation of printed theses and dissertations to the university officials and academics [...] We made use of several channels, including the formal meeting, personal communication and printed promotional media’ (Participant PA1).

'I would say personal communication played an important role in promoting OA among academics and university managers [...] We talked to all of the head of schools and departments within the university' (Participant PA2).

'We distributed the information related to the OAIR activities through emails and e-posters' (Participant PA4).

'I promote some interesting titles of students' ETD on my social media accounts. I also make use of emails and messengers to communicate with the academics' (Participant PA13).

The top-down approach was only mentioned by two participants from a public university. It is reported that in 2007 there was a project initiated by a central directorate to build a shared-repository. Unfortunately, the project failed due to poor planning. In the Indonesian public institution context, the word 'project' often implies a negative nuance. It is perceived as a developmental programme with no proper planning and evaluation mechanism. The participant also emphasised this term in this context:

'There was a project funded by the Directorate to build a shared repository using X [a digital library software]. The repository only sustained for about two or three years. Yeah, 'it was just a project'. It was a costly investment and we couldn't afford the maintenance cost. So, when the Directorate could no longer provide the funding, then it just stopped' (Participant PA6).

From the interviews, there were several interesting findings on how the advocates were promoting the OAIR. Two participants from different universities highlighted the importance of using specific types of data when communicating the benefit of OA to the top managers. Both of them were IT administrators in their libraries:

'There were a lot of external users both from academic institutions and industrial sectors who contacted us asking [for] the full-text version of ETDs. We had the data on these users and we showed them to our university top managers' (Participant PA11).

'It's the nature of our university management only to accept arguments that [are] accompanied by supporting data. Therefore, we provide the information on the number of printed copies of theses and dissertations collected year by year. A simple forecast [is] suggesting that within five years there would be no spaces [in the library] to store these collections' (Participant PA3).

4.3. Main messages of the advocacy

Participants were asked about their key messages when promoting OA to the various stakeholders. The staff members were not articulate enough to respond to the question. Most of them felt that they were not qualified to answer the query as they were not involved in the advocacy programme. On the other hand, interviewees from higher positions tended to respond with lengthy answers and had more than one message.

i. To combat plagiarism

Nine participants made use of the need to prevent plagiarism as one of the main themes of their advocacy:

‘I told the Director that the OAIR is an effective tool to combat plagiarism. Despite the fact that there were a lot of debates among academics about this, he enthusiastically agreed with the idea’ (Participant PA5).

‘The main idea is to make the information widely available so that any plagiarised documents will be easily identified’ (Participant PA6).

Interestingly, six participants reported that the fear of being the victims of plagiarism has also been a concern for many academics:

‘The concern is about being plagiarised. Conducting research means investing a lot of time, energy and funding resource. They will feel sorry if others steal their works and take the credit’ (Participant PA3).

Participant PA1 advised those academics to shift their focus on to the prevention of plagiarism rather than complaining about this issue:

‘We need to be more concerned about the possibility of students and us being plagiarists. Public access on ETDs should be pressure for them to better supervise their students and improve the quality of their research outputs’ (Participant PA1).

ii. Institutional prestige and reputation

Seven interviewees highlighted the need for the universities to improve their institutional prestige, which included enhancing public image and university rankings. Four of them mentioned the use of an IR to elevate the university ranking in the Webometrics:

‘People would not know our institution and its research outputs if we restrict the public access [to the IR]. When the university wants to compete in the Webometrics university ranking, it is also necessary to implement the OAIR as the rich files indicator is used by the Webometrics team to assess the university web performance’ (Participant PA9).

‘Every time I meet the top managers, there must be a discussion about the institution’s reputation. I told them that the OAIR is a significant aspect to help the university climbing the rankings’ (Participant PA11).

However, Participant PA1, who was a former head of the library, communicated the significance of the IR to the university’s image in a more subtle way:

‘The OAIR will bring the opportunity for the university to take the leadership role among other HEIs in openness [...] It can also be used to improve our image in public’ (Participant PA1).

Nevertheless, he acknowledged that the Webometrics has helped the library to gain more support from the parent organisation. It was when the Directorate of Higher Education highlighted the use of the ranking system as one of its assessment tools in 2006. He also argued that Webometrics has also positively influenced the attitudes of many Indonesian universities toward OA. His observational view was also supported by two other participants from different institutions.

iii. Corporate information management

Seven participants reported that they promoted the OAIR as the best way to manage the ETD collection:

‘Our former head of library said that we need to digitise our printed collection. I advised her to store the files in a server in order to support their retrieval’ (Participant PA1).

Four interviewees cited that they did it by reporting real problems faced in the library, such as the space issues and the increasing volume of printed theses and dissertations:

‘There’s a rapid growth in the number of students’ theses and dissertations. The library will no longer be able to store and display the printed version of these documents’ (Participant PA3).

‘It is challenging to manage the printed copies of theses and dissertations. We’ve lost some of these collections. There is a risk that they won’t be easily accessible due to the mismanagement and mistreatment’ (Participant PA11).

‘There was an increasing demand from our students to retrieve and cite the quality theses collected by the library. But then we faced the problem that our spaces have the capacity limit. Moreover, some of our rooms didn’t meet the ideal requirement for displaying such [a] huge amount of printed copies’ (Participant PA12).

Open access awareness

Surprisingly, despite the fact that OA is a central idea of the OAIR advocacy, only four participants were citing the need for institutions to comply with the current trend of OA as their advocacy message:

‘We are already in the OA era [...] and, on top of that, we need to share knowledge’ (Participant PA8).

‘I advised them that OA has been widely adopted in many other universities’ (Participant PA11).

Participant PA1 reported that it was challenging to promote the OAIR using the concept per se. According to him, when he started the OA promotion in 2005, the term was not widely used in Indonesian HE institutions:

‘I only knew a few years ago that the university director did not fully understand the concept of OA and its benefits for the institution when approving the idea. He did it just because he trusted us’ (Participant PA1).

Interestingly, only two participants cited the need to gain more citations as their advocacy message to the academics and university board.

4.4. Key factors to implementing open access institutional repositories

No specific questions were asked to address the primary factors that have helped the universities in implementing and sustaining the OAIR. However, there were repeated patterns on these topics found in the data sets. According to the interviewees, an institutional mandate was primarily needed in the earlier phase of OAIR implementation. In order to continuously increase the contents and sustain the service, the library staff had to develop two other approaches: the library-mediated archiving practice and IR training sessions for students and academics.

4.3.1. Institutional open access mandates

Participants were asked about the most significant forms of support that the libraries have received from parent organisations. More than half of participants regarded the willingness of the top managers to impose OA policy as the most crucial factor in developing an IR. As a side note, the four universities did not adopt the ETD embargo policy:

‘The most important factor is when the policy makers agreed to adopt the approach and released the OA policy’ (Participant PA3).

‘We weren’t seeking the mandate before implementing IR. So, we’re glad when the university released the formal statement. We need it as a legal justification to impose the OA policy’ (Participant PA8).

Participant PA9 emphasised that the mandate document was useful especially when unexpected situations occurred, especially related to the students’ refusal to make their research documents open access. This helped him to argue in favour of the mandatory archiving policy. Nevertheless, six interviewees reported that the mandate did not function well in specific circumstances:

‘Sometimes their departments or the organisations they studied asked students not to publish the reports in OA due to confidentiality issues’ (Participant PA2).

‘There were several academics who instructed their students not to publish in OA. I am not really sure about their reasons. May be it was due to the fact that they conducted the research collaboratively’ (Participants PA13).

The academics’ concern over the copyright issue was mentioned by three participants from three different institutions. Participant PA5 indicated that the publication statement will help the library to deal with the issue:

‘Some academics [are] concerned about their students’ ETD copyright. We made use of the publication statement confirming that students are willingly to transfer their ETDs’ copyright to the library as a publisher’ (Participant PA5).

4.3.2. Library-mediated deposit

Two private institutions, Universities 1 and 3, adopted the mediated-deposit approach. The directors of two other libraries reported that their universities had already implemented the self-deposit policy. In contrast, their staff members claimed that in practice their roles are still dominant in the deposition process.

Participant PA3 identified the positive impact of the mediated-deposit method:

‘It allows the library to present and display the ETD collection in a more standardised way. If we adopt the ‘true self-archiving’, it’s hard to ensure the accuracy of the records. I am afraid we might end up having a messy collection with poor quality of metadata’ (Participant PA3).

Other participants, however, pointed out that the approach had its own complexities on a practical level, mainly due to the time-consuming and labour-intensive aspects:

‘We felt overwhelmed when many students didn’t present their documents well. It means that we should work harder checking and correcting the documentation errors’ (Participant PA2).

‘Honestly, we’re so tired of doing this [mediated-archiving]’ (Participant PA8).

‘We have many other works to do. It’s bothering me when some academics keep asking when I’ll deposit their articles’ (Participant PA10).

It was also reported that both libraries involved all employees to manage the collection. University 1 utilised extra hours to handle the workload:

‘All administrative staff members work on Saturday or extra hours to do the task. It’s impossible to just rely on people within the [IR] team’ (Participant PA2).

‘Everyone’s involved in verifying and depositing the documents, including me, a library director’ (Participant PA8).

The self-mediated deposit policy can be considered as a promising way to tackle the workload issue. Both private institutions were aiming to adopt the approach in the next few years:

‘We’re planning to adopt self-deposit within [the] next year. So, when it comes the time to publish ETD, students can upload their documents online’ (Participant PA4).

When probed for the next role of librarians in the new system, Participant PA4 mentioned that they would be mainly responsible for reviewing submissions in order to ensure the quality of records.

Participant PA13, however, stated that ‘true self-archiving’ could not work well when the IT infrastructure was poor:

‘Last year we did all the stuff. The students could not deposit their ETD documents due to the peak season [of thesis submission] and the server capacity issue. So, they just sent their files to our email and we did the entire process’ (Participant PA13).

4.3.3. Library training sessions for students and academics

The courses were aimed at teaching students and academic researchers how to present the documents and understand the procedures of self-archiving. It was evident that these training sessions were designed to prevent them from making unnecessary errors in document presentation. Three out of four libraries have made use this course as part of their services. University 1, as cited by Participant PA3, also taught students about discovering information and plagiarism and referencing. The problem was that academics and students tended to overlook the importance of the course for their work and study:

'The course was also promoted to the first and second year [undergraduate] students, but they felt they haven't yet needed it' (Participant PA3).

'It's something common here when academics and students didn't respond well to our course invitation. They only contacted us when it comes the time to publish their works' (Participant PA7).

Two participants felt that it should also be the responsibility of the academics to teach students about acquiring the skills needed for writing their thesis or dissertation:

'I think teaching the basics of thesis and dissertation presentation is part of their jobs as lecturers. However, many of them ask their students to just go to the library. But, it's impossible for us to teach them all' (Participant PA2).

'At first, we expected the academics to master the skills [of information searching, referencing, etc.] and then teach them to their students during the supervision. Some of them joined our training sessions and took the class very seriously, but others were too busy. In the end, we just teach students' (Participant PA3).

4.5. The actors involved in the advocacy programme

Various players were identified as participating in OA advocacy. All participants reported that the top and middle managers had significant roles to market the concept of OA to the decision-makers and other key individuals. However, administrative staff had responsibilities to teach the students and academics the use of the repository. It was frequently mentioned by most participants that OAIR advocacy was initiated by their previous heads of library who were also librarians. It should be mentioned that, to date, many (if not the majority of) academic libraries in Indonesia are led by academics:

'The main OA advocate here was the former head of the library. He talked to the university top managers, the academics and the head of the schools. His goal was to make them approve the idea of OA and prepare the prerequisite infrastructure for IR implementation' (Participant PA2).

'This was begun by our former head of the library. He asked me to experiment with the IR software [...] There were several times I accompanied him to meet the Director to talk about the OAIR' (Participant PA9).

Based on the interviews, it was known that staff members were more responsible in technical and operational tasks. When the researcher tried to investigate their knowledge about the OA promotion, the participants responded with their experiences in managing the deposit process and dealing with the academics' and students' inquiries:

'A senior librarian who's now taking her maternity leave was often assigned to teach academics the use of IR and other related fields. I only teach undergraduate students in [an] IR training session' (Participant PA7).

'I'm responsible for helping the academics when [they are] facing problems with the deposit system' (Participant PA13).

It was found that the close circle of the top managers had also contributed to the success of the advocacy. However, only three participants mentioned this:

'The director's assistant and many academics have helped me a lot in the process' (Participant PA11).

'We have a university recognition team [that] consists of influential academics and IT staff members. I am one of its members. The team is our biggest supporter in the OA implementation' (Participant 12)

4.6. Social sustainability of open access institutional repositories

One of main aspects of IR social sustainability is the user acceptance of IR. Most participants suggested that as long as the students did not have any issue with either the organisations they studied or their academic supervisors, they were enthusiastic in regard to self-archiving. It needs to be mentioned that students might also have felt obliged to deposit their works due to the university mandate:

'They are quite positive about the OAIR. Many of them even joked that their ETDs were their masterpieces and they have right to be widely known by public' (Participant PA11).

It was also identified by several participants that easier access to the ETD collection had encouraged students to access them more via IRs than through physical visits to the libraries:

‘Students used to access the printed thesis collection in the library. But now they [have] already shifted to the IR. I think the use of IR by students is quite good’ (Participant PA3).

‘It is relatively easy to promote the use of OAIR to students. Once we promote it, they use it. Yeah. Because they need it as one of their sources for obtaining scientific information’ (Participant PA12).

On the other hand, participants had differing opinions when commenting on the use of IRs among academics. It was frequently cited that there was a national policy requiring academics to archive their research outputs in OAIRs. Participants from Universities 3 and 4 reported that the mandate had helped the library in increasing the academics’ awareness on OA and the number of their articles being deposited:

‘Many academics have asked our help to publish their research papers in IR. They [have] already realised the use of IR in advancing their academic career’ (Participant PA8).

‘The national policy has encouraged more academics to deposit their articles on IR. They considered that this is the fastest way to disseminate their articles’ (Participant PA9).

‘They have voluntarily deposited their works in IR [...] Even some of them have deposited on their own or being helped by their personal assistants’ (Participant PA13).

However, other participants expressed their negative views about academics in responding to the national mandate:

‘The number of academics’ publications in IR is still very low [...] It’s also saddening me that their motivation in self-archiving is merely for acquiring better positions’ (Participant PA5).

‘The academics were merely motivated by career advancement. Very pragmatic indeed’ (Participant PA6).

It is known that University 2, where Participants PA5 and PA6 worked, has already issued a mandatory publishing policy for academics' research outputs. Nevertheless, it seems that it has not yet resulted in a more concrete participation. Participant PA11 cited that the mandate would work if the self-deposit system was already established:

'I think it takes time to make the mandate work. Academics are busy. We hope that we can officially introduce the self-deposit policy as soon as possible so that they can archive their papers on their own' (Participant PA11).

As for University 1, the participants reported that the academics' research publications were managed by another institution, namely the Centre for Research and Community Service. As a result, they could not comment much on the use of IR by the academics.

4.7. Measuring the economic sustainability of open access institutional repositories

When asked about the funding, most participants reported that there was no special budget allocated to finance the repository. However, they considered that it was relatively easy to get financial support when the library team need it:

'There's an annual fund plan for the library. It's up to us how we're going to spend the money. But, there's no such yearly budgetary allocation for the repository. When we need to purchase new hardware, for example, then we can use this budget' (Participant PA2).

'The university tends to be agreeable when we need to purchase something related to the repository development, such as new servers' (Participant PA9).

Participant PA6, who worked in a public university, highlighted a major benefit for his institution of being a government organisation:

'As a public university, we're financially supported by the government funding. I don't think that we have serious problems related to either the financial resource or human resource' (Participant PA6).

The economic sustainability of an IR, however, is not only measured by the availability of continuous funding but also how it promotes wider benefits to the users. It was found that three out of four universities had displayed all or most documents in full-text, and thus available for further purpose use (download, copy, redistribute, print, etc.). Alternatively, one university still adopted semi-OA in which the items were presented in view-only mode. One participant from this institution cited that the library team did not consider it as an ideal approach to green OA:

‘We only provide items in view-only mode. That’s because the university didn’t want the library to lose its revenue from the printing charges (of the ETD collection). Even though I didn’t think that this is an ideal approach to OA implementation, it is a win-win solution for the university and the library’ (Participant PA1).

4.8. Misconceptions as barriers to advocating open access institutional repositories

All participants were asked what they felt were the main challenges in advocating OAIRs. The university boards’ and academics’ misconception of OA was mentioned as a barrier to promoting IRs by the majority of participants. It was identified that there were five misunderstandings about the OA movement. These included their misbelief that OAIR would increase plagiarism and degrade the university’s image due to the public display of low-quality research outputs, and that OA was in conflict with confidentiality, copyright policy and traditional journal publishing. Fear of potential plagiarism was found to be the most highly cited reason for rejecting OA:

‘Some academics thought that IR would be dangerous for university image. They doubted that the undergraduate thesis was good enough to be published in IR. There was also fear among academics that published items would be plagiarised’ (Participant PA3).

‘I supposed that academics were already aware of the OA trend, but worried of potential plagiarism’ (Participant PA12).

With regard to the confidentiality issues, Participants PA3 and PA12 reported that they had received several complaints from other organisations. They accused the library of delivering negative images about their services and products through students’ ETDs. When the researcher probed them for a solution to prevent similar events happening, each had their own opinion. Participant PA12 asserted that academic supervisors should improve their supervision. He also highlighted the need for students

to highly protect the anonymity of participants and organisations included in their studies. Participant PA3, though, tended to agree with the restriction policy imposed on these collections:

‘The student didn’t anonymise the organisation’s identity sufficiently. His supervisor also didn’t expect that the organisation would complain about this. It was his first experience to deal with such [an] issue. In this case, I think academic supervisors should be more concerned about the confidentiality of research subjects’ (Participant PA12).

‘We still store those students’ documents, but we restrict the access [to them]. Departments and institutions they studied asked us not to publish these ETDs in OA. So, we can do nothing about it’ (Participant PA3).

It was mentioned by Participant PA12 that many academics asked their students not to publish their ETDs in OA due to the collaborative nature of their research. It was also cited that his library has no embargo policy on these items:

‘We’re still looking for the best approach to the ETD embargo period. Let’s say, for example, we’ll give students and academics two years of embargo so that they can publish their research on paid-journals within this timeframe’ (Participant PA12).

He also reported that academic researchers had never informed him on how long the libraries should wait to be able to publish their articles in the IR.

The copyright concerns were least mentioned as a barrier in promoting OA. Three out of four universities had made use of publication statements to resolve this issue. It was found that Universities 1 and 2 had explained in the agreement that the ETDs were published under a Creative Commons attribution. The other two institutions did not specify this. This statement is formally attached in thesis and dissertation documents.

Chapter 5: Discussion

This chapter focuses on discussing the best practices for advocating OA and their implications for the sustainability of IRs. However, as there were several unexpected findings emerging from the results, it is considered relevant to discuss them in the analysis. It is expected that both positive and negative practices found will be a lesson learned for future OA advocates and the wider HEI community in Indonesia. This section itself is structured according to the research objectives listed in Chapter 1.

5.1. The meaning of sustainability in open access institutional repositories

Most participants discussed the sustainability of OAIR in terms of long-term institutional commitment to OA and continuous improvement programmes. It appears that they were aware that the sustainability of IR is the result of strategic, long-term decisions made by libraries together with the university decision-makers. It was also expected that academics should be more committed to IR both in the forms of promotion of its use and their participation in self-archiving activities.

Provided that the four universities have imposed OA mandates, it might be assumed that there would be no major obstacle in sustaining their IRs. It was suggested, however, that the leadership change could be harmful to OA adoption. It could be argued that potential successors in the university management may have unfavourable views toward IR implementation. This might be due to their misunderstanding about OAIR. In the worst case, they may be suggesting that the libraries readopt the restricted access policy. Two participants highlighted the need for the libraries to develop sustainable OA advocacy programmes in order to handle this problem. Taking this into consideration, it would be useful to conduct further research to investigate the impacts of change in organisational structure on OAIR implementation.

Various development programmes were also planned by the library managers. These included adopting the self-deposit policy, developing a mobile version of IR, starting an IR handbook and training sessions, and improving the variety of collections. It is interesting to note that two libraries that have adopted the self-deposit approach are both public institutions. Although there are still several flaws in practice, this may reflect that IRs in public universities tend to be more developed and financially sustainable than those in the private ones. This speculation is also supported by Participant PA6's statement that his institution has benefited from being a government institution. Three participants from a private university expressed their concerns over the zero-growth policy in staff recruitment applied by their university.

The results suggest two tendencies: first, the sustainability in the IR context is often associated with its social aspects; and second, the current focus of libraries is to maintain their parent organisations' commitment to OAIRs. Thus, it might be assumed that the institutions involved in this study theoretically operate at the lower levels of sustainability. In this case, this is not surprising since IRs in Indonesia are still in their early adoption stages (Liauw & Genoni, 2017).

5.2. Key characteristics of the effective advocacy strategies carried out in Indonesian HEIs

5.2.1. Open access advocacy: a combination of bottom-up and top-down approaches

It has been suggested that IRs implementation is best approached using two main strategies together: advocacy and OA mandates (Stewart, 2013). This study, which focused on investigating OA advocacy and its effects on the sustainability of IR, has confirmed this view. It was shown that the OAIR implementation was the result of advocacy and the institutional OA policy. The advocacy was largely effective in helping the libraries to obtain the university's approval on OAIR implementation. The mandate then led to an increase in the number of records, especially the ETD collection. It appears that mandates are relatively effective in solving organisational barriers, as argued by Pinfield (2005).

The OAIR adoption in these universities can be considered as fitting the category of 'authority innovation-decisions' (Rogers, 2003). These approaches are characterised by the dominance of a few people in authority regarding their influence, 'power, status, or technical expertise' in the decision-making process (Rogers, 2003, p. 28). In this current study, these distinguished individuals are members of the university boards, library managers and library IT administrators. This result is in agreement with Oguz's (2016) finding, which showed that the authority-innovation decisions were employed to handle the administrative issues in a digital library (DL) management, including the management style and the direction of the DL unit. An institutional OA mandate is also another proof of how the authority uses its power to require academic researchers and students to publish in IRs. This may be applied to the majority of IRs as the use of institutional mandates is ubiquitous among HEIs.

In order to promote OA, participants used various communication channels, for example, face-to-face meetings, social networking sites and emails. Prominent academics and the close circle of the top managers also served as a communication bridge for the libraries. A similar strategy was also

conducted by Mackie (2004) when developing the IR of the University of Glasgow. Jones (2006) classifies these academics as opinion leaders who can influence others' attitudes toward innovations. However, in this study, only a minority of participants acknowledged the roles of these individuals. This suggests that there might be organisational cultural differences between the four universities studied that have resulted in the variety of academics' participation in OA advocacy.

5.2.2. Widening the benefits of open access institutional repositories

Open access is not new for libraries in Indonesia, but its adoption may be considered relatively slow (Priyanto, 2015). As a result, communicating the benefits of OA can be challenging since the concept may not be thoroughly understood by stakeholders. Participant PA1's experience implied that the top managers' unfamiliarity with the term could make it difficult for advocates to promote IR using the OA terminology. Most participants convinced the university board by citing that OA would be useful in preventing plagiarism, would improve the institution's prestige and reputation and would better manage the thesis and dissertation collection. These results were consistent with a previous study that investigated the motivation of Indonesian universities in developing IRs (Liau & Genoni, 2017). The only difference is that the need to comply with OA has also been stated by participants, although it was not mentioned as much as other messages.

The study's finding demonstrates that participants tend to promote OAIR using its practical advantages; for example, IR as a plagiarism detector. Anecdotal evidence suggests that plagiarism is a serious problem, especially in smaller and less reputable universities. The enacting of the Ministry of National Education Act No. 17 / 2012, which requires students and academics to deposit their research outputs in IR to prevent plagiarism, can also be an indicator of how prevalent the issue is in Indonesia. Thus, when the library team uses plagiarism prevention as a reason for establishing the IR, the top managers are likely to approve the idea.

Most participants also revealed that the management would be more supportive if it could be shown that university ranking would improve. Webometrics emerged as the most used ranking system. It can assess the universities' performance through their web presence. Without further evaluation, however, this can be counterproductive for IR development. Arguably, the IR may be merely treated as a competition machine, but not managed according to the standard of information services. Liau and Genoni (2017, p. 21) identify that IRs in Indonesia suffer from four major quality problems:

- i. *Different collection development policies and access policies used by academic departments in the same institution;*

- ii. *Lack of standardized author naming conventions;*
- iii. *Lack of awareness regarding privacy, confidentiality and copyright issues; and*
- iv. *Sub-standard and occasionally chaotic content.*

Several participants also emphasised that the IR is the utmost approach to research outputs generated by the universities. They highlighted the need for the library to start transforming the ETD printed collection to the digital and online access service. In their recent study on green OA in Indonesia, Liauw and Genoni (2017) categorised this practice as the use of IR as corporate information management.

It could be argued that the use of ‘additional benefits’ of OA in its advocacy may suggest that there might be value differences between library staff and the university board. Thus, communicating the importance of OAIR using its specific benefits for stakeholders can be seen as an effective way to compromise and bridge the value gap between the OA promoters and potential users (Armstrong, 2014).

5.3. Key actors of the advocacy: academic librarians and staff members as change agents and change aides

The role of librarians and staff members in OAIR development is significant. They have at least three major contributions: promoting OA to the academics, delivering training sessions, and handling deposition. This finding is consistent with previous research, which suggests that librarians played crucial roles in developing IR through their involvement in these practices (Kamraninia & Abrizah, 2010). Senior librarians have a greater responsibility for educating academics on a repository’s operational aspects as well as the wider concepts of OA and scholarly communication. On the other hand, staff members often have limited knowledge of the OA concept. Their responsibilities tend to be circumscribed to dealing with operational tasks. According to Roger’s change agency, librarians and staff members can be categorised as change agents and change aides, respectively. The former is needed mostly in the earlier stage of adoption, whereas the latter is more likely to be used when the IR is already developed as a permanent service (Jones, 2006).

Several participants admitted that their libraries are still adopting full mediated-deposition. Armstrong’s argument that this approach allows librarians to conduct the quality check on the metadata can be seen to apply to these participants (Armstrong, 2014). Requiring a lower level of involvement from the busy academics was also another reason for implementing the strategy. An earlier study on the factors affecting the increasing number of deposits suggests that mediated

deposit is more important in populating an IR than institutional OA mandates (Zhang et al., 2015). Provided that the IRs were used to improve the university ranking, it can be assumed that the method was also selected due to the need for the library to contribute to the Webometrics university ranking.

Several participants from Universities 1 and 3 noted that their libraries would soon start implementing the self-deposit approach. Participant PA4 commented that librarians and staff members would merely be responsible for reviewing the submission. His view is in line with that indicated by Kamraninia and Abrizah (2010) in that the roles of librarians to conduct quality checking is crucial in 'true self-archiving'. It was suggested by Participant PA9 that in order to implement the policy the library will need to prepare the IT infrastructure as well as the readiness of users. However, two other libraries that have adopted self-archiving policies were found to still have problems with the depositing mechanism. This finding was unexpected and suggests that both institutions have not been ready yet to fully adopt this strategy. In other words, the role of librarians and staff members remains predominant in depositing and quality controlling irrespective of the approach taken.

5.4. The impacts of effective OA advocacy on the sustainability of an IR

5.4.1. The social sustainability of open access institutional repositories

As discussed in the literature review, what is meant by 'social sustainability' in this dissertation is the attitudes of academics and students toward the OAIR. Chowdhury (2013) suggests that economic sustainability is aimed to develop a knowledgeable society by ensuring the fair access to information.

The practice of immediate OA seems to support the social sustainability of IR policy. It was found that the four institutions adopted immediate OA and had no embargo policy on ETDs, meaning that there is a potential reduction in terms of time and effort for users to access recently published items. Chowdhury (2016) demonstrates that making information readily and easily accessible and helping 'users accomplish their tasks as effectively and efficiently as possible' is the objective of social sustainability of a digital information service (p. 2379). Nevertheless, no clear policy has been made to regulate academics/students' collaborative studies that either will be or have been published in Gold OA journals. Thus, there is a risk that these publications will be permanently inaccessible for public users.

In this study, students were found to be more aware of self-archiving and indicated a more positive response toward IR implementation. In contrast, academics tended to be slower in adopting the innovation. It could be argued that the institutional mandate is likely to be more coercive toward

students than academic researchers as they were required to publish in an IR prior to their graduations.

Many participants frequently talked about the circular 2050/E/T/2011, which mandates the academics to deposit their articles in IR. It is highlighted that the article stored will be considered for academics' biennial performance reviews. However, it appears that the results have not been yet satisfactory. Several participants in this study reported that academics' deposits remain low regardless of the national policy. Prior research into the readiness of Indonesian academic libraries for OA adoption has shown that mandates do not work well when applied to academics (Priyanto, 2015). Participant PA11 speculated that this was due to their heavy workload both as lecturers and researchers. Nevertheless, this cannot be generalised as Participant 13 indicated a considerable level of awareness among academics to archive records on their own. Further research, therefore, would be needed to shed light on the factors that impede them from embracing self-archiving in IR.

A previous study on barriers in self-archiving found that academics were concerned with the amount of time spent to learn about the IR (Kim, 2010). According to the results of this study, it appears that academic researchers preferred the mediated-archiving over the self-deposit approach. The majority of participants, however, were not in favour of this method due to its impracticality in handling the larger volume of items. It has also been argued that 'many academic researchers do not like to be forced to do anything' (Pinfield, 2005, p. 6). Several participants felt that many academics were not eager to participate in IR even when the self-deposit service was offered. According to Chowdhury (2014), the extra workload for self-depositing can also affect the economics and social sustainability of IR.

5.4.2. Economic sustainability of open access institutional repositories

The majority of participants reported that their libraries are supported by annual funding with no separate allocation for the IR. However, most of them claimed that they have never experienced any financial issue when establishing and maintaining the IRs. This suggests that there is continuous funding to support the development of IRs. Cullen and Chawner (2011) highlight the need for financial resources to ensure the sustainability of repository services. Lagzian et al. (2015) also found that 'resources' is an important feature in implementing IR.

Another notable yet indirect economic benefit of IRs was the increase in the universities' public value. The improvement in the university image and reputation may lead to more opportunities for libraries to gain funding from parent organisations. It was suggested by several participants that their

university boards tended to show more support when the university rankings in Webometrics were improved. There may also be potential students who consider the university ranking as an important aspect when selecting their future study places.

Immediate OA adopted by most universities, which is also likely to reduce users' costs for printing and visiting the library site. There was, however, one university that took the semi-restriction approach by adopting a view-only mode for the majority of its IR collections. By doing so, the library may not encourage the users to be more efficient. Additional costs may also be needed to access the documents, which can emerge as printing expenses and Internet accessing costs due to repeated visits to the IR website.

Despite the evidence that the continuity of funding is secured, several practices appear to be detrimental to the IR's economic sustainability. Most libraries were found to still use the mediated and semi-mediated-deposit approaches. One library even required librarians and staff members to work extra hours to archive the deposits. Consequently, there is an additional cost allocated for payment. In addition, several participants acknowledged that in the peak season of ETD submission, the self-deposit could change into a mediated one due to IT infrastructure restrictions. This practice is both socially and economically inefficient for both the library and the operational staff members.

A model of IR sustainability, below, is adapted from the model of sustainability of digital information systems and services developed by Chowdhury (2013). This figure depicts the interrelationship between the three aspects of IR sustainability. Although this study does not include environmental sustainability, it is suggested that there are two aspects of service that may contribute to advance the environmental impacts of IR.

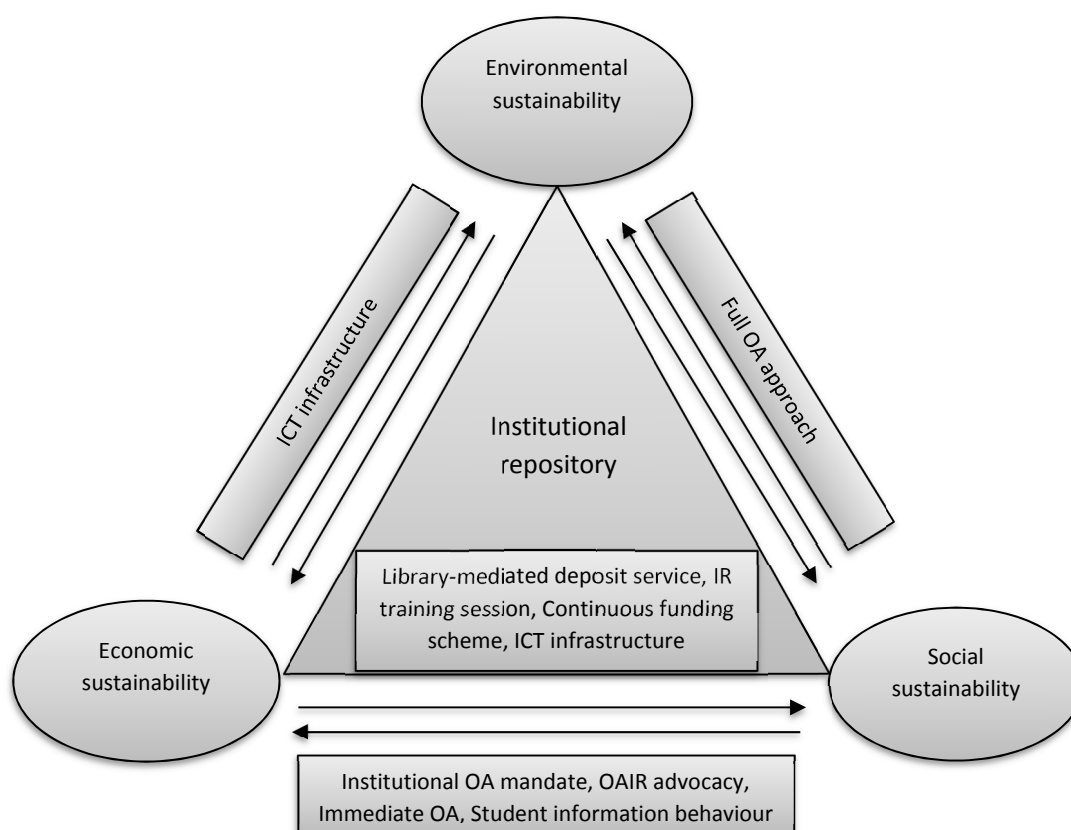


Figure 1: A model of sustainability of IR

5.5. Barriers in advocating for sustainable open access institutional repositories

A larger number of participants believed that universities' top managers were doubtful about embracing the self-archiving mainly due to misconceptions about OA. These mostly related to the misbelief that OAIR would lead to an increased risk of plagiarism. A Malaysian study showed that the majority of academics were often concerned about plagiarism when dealing with IR (Abrizah, 2009). This research showed similar results in that most participants frequently cited the fear of being plagiarised as the main barrier in acquiring mandates and gaining support from academics. This suggests that several academics believe that a wider access to scholarly articles can increase the likelihood of plagiarism. It was proposed by Participant PA1 that the focus should be shifted to how to teach students to prevent and avoid plagiarism. As discussed earlier, most participants also promoted the use of IRs as a plagiarism prevention tool. Given the fact that IRs in the four universities have been supported by mandates, it may reflect that the advocacy programme has managed to bridge the value discrepancy between libraries and parent organisations.

Another significant challenge when promoting OA to the academics involved confidentiality issues. Nothing has been discussed in the literature about confidentiality concerns and their impacts on OAIR implementation. It was found that participants from University 1 tended to accommodate the expectation of academics and external institutions to impose restrictions to a few students' publications suffering from this issue. Conversely, those from University 3 were eager to encourage academics to improve their supervision to students. This result suggests two possibilities: (1) there are confidentiality agreements between students and the institutions they studied, which in this case should be respected; and (2) there is a low level of awareness among academics and students on research ethics.

Participants' experiences in dealing with confidentiality complaints also implied that the confidentiality matter had become a serious, yet unsolvable problem for arguably many other libraries. It seems that the idea of OAIR is directly adopted from universities in developed countries without considering the fact that they have an established research ethics framework. Consequently, this raised at least three concerns regarding the research undertaken in Indonesian universities. First, there was a lack of ethical standards in relation to conducting research. Many universities in Indonesia have not yet formally adopted research ethics policies. Second, it may mirror the fact that several academics did not supervise students closely enough, particularly in handling the confidentiality concerns. Third, there was the issue concerning students' ability to write up their own research findings. Although potentially accelerating the scholarly communication, the OA mandate should be treated with caution when adopted in universities with no clear research ethics regulation. Given these findings, it is important that an appropriate standard of ethical approval is established in these universities.

The academics also appear to think that OA is incompatible with the conventional journal publishing model. This has been exacerbated by the fact that the library managers are still unfamiliar with the embargo period. Hence, there are no clear guidelines on how to approach the embargo of both ETDs resulting from academics/students' collaborative research and articles published in paid journals. Discovering a low level of the library staff's readiness to anticipate this issue is considered an unexpected result of the study.

Chapter 6: Conclusion and Recommendation

In this section, the main findings with regard to the research questions are summarised and general conclusions based on the results of the study presented in this dissertation are given. These will be followed by several recommendations for OAIR advocates in improving the advocacy and suggestions for further research.

6.1. Meeting research questions and objectives

The aim of the present research was to examine the main factors contributing to effective OA advocacy and their implications to the sustainability of OAIRs in Indonesian universities. This study has shown that the sustainability of OAIRs is defined as the ability to maintain a shared commitment of three key stakeholders of OAIRs, namely the university boards, academic libraries and academic researchers, to support and develop OAIRs. Libraries expect the decision-makers and academic researchers to be more committed to IR. These can be realised through imposing long-term institutional OA mandates and participating in self-archiving and promotion of IRs. As for libraries, the sustainability can be achieved by continuously advancing new services and advocacy programmes. These results suggest that the institutions included in this study still attempt to meet the basic aspects of IR sustainability.

However, misconceptions on OAIRs that are being held by the university boards and academic researchers present the main barrier in advocating IR. Several popular myths that are widespread among the university managers and academic researchers are: an OAIR can potentially increase the risk of plagiarism; and it is disadvantageous for a university's image due to public disclosure of students' research outputs. Other misconceptions are the beliefs that OAIR is not compatible with traditional journal publishing and the confidentiality concerns.

6.1.1 Main findings with regard to the research questions

Research question 1:

What are the key factors contributing to effective OA advocacy in Indonesian HEIs? (Chapter 1)

The results of this study indicate that there are three contributing factors that lead to effective OA advocacy: (1) the establishment of top-down, bottom-up advocacy strategies involving parent institutions, library staff and academics; (2) the addition of wider benefits of OA in the advocacy

messages; and (3) the addition of a mediated-deposit service and IR training sessions in the library support services.

In addition to these factors, the success of OAIR implementation appears to be the result of ‘authority innovation-decisions’. This is shown by the use of institutional OA mandates and the involvement of library and university top managers in the adoption decision.

Research question 2:

To what extent does effective OA advocacy contribute to the sustainability of an institutional repository? (Chapter 1)

As previously informed, this research aimed to examine the social and economic sustainability of OAIRs. The findings of the study suggest that advocacy practices affect the social and economic sustainability of IRs as follows:

i. Social sustainability of IRs

Effective OA advocacy makes room for libraries to adopt immediate OA, meaning that users are supplied with recently published collections. This potentially reduces users’ time and resources spent in accessing information. Another impact of the advocacy on the social sustainability of IRs is the considerable awareness of OAIR among students. However, despite these positive outcomes, there is evidence that OAIR advocacy has had a relatively small impact on the attitudes of academics.

ii. Economic sustainability of IRs

The advocacy helps the libraries to gain continuous funding for developing IRs and improve their institutions’ prestige and reputation, especially their rankings in Webometrics. With regard to the impact on users, it helps students to reduce costs in terms of their printing and repeated access to IR websites.

6.2. Recommendations for OA advocates

The findings of this study have a number of important implications for future practice. The following recommendations are suggested for IR managers:

- a. The findings show that there is a concern among library managers on OA adoption with regard to a change in the university leadership. Therefore, there should be more sustainable advocacy programmes initiated to solve this problem.

- b. Libraries need to raise the awareness of IR among academics by highlighting the benefit for improving their impact factor.
- c. Other than having sustainable advocacy programmes, the libraries ought to formulate clear regulations on the student embargo in order to solve the confidentiality issues and accommodate those who need further publications from their research.
- d. Academic librarians should also be encouraged to learn more about the wider concepts of scholarly communication, such as the spectrum of OA, journal embargo and other supporting features, for example, the use of the SHERPA/RoMEO database to identify the embargo periods of journals.
- e. As there have been several cases where libraries have had to deal with confidentiality complaints, librarians need to work together with key academics to advocate the establishment of university and department research ethics committees. Close supervision should also be more promoted among academics. Additionally, a clear policy on the confidentiality agreement also needs to be set up.
- f. Libraries can start a Scholarly Communication Centre as a place where academic librarians could educate the academics on the publishing mechanism both in OA and the traditional publishing model.

6.3. [Suggestions for further research](#)

There is scope for further research in this field using a larger number of participants and institutions and involving aspects of IR environmental sustainability in the investigation. It would also be interesting to examine the individual types of IR sustainability in a more in-depth manner. As there are several unexpected results in this study, it may be useful to investigate them more in future studies, such as the effects of organisational structural changes on OA implementation, factors affecting OAIR adoption among academics and the extent to which confidentiality concerns influence the implementation of OA.

Finally, as IR sustainability is considered as a dynamic process rather than a fixed status, it would be fruitful to conduct longitudinal studies on this area.

Word count: 14,538

References

- Abrizah, A. (2009). The cautious faculty: their awareness and attitudes towards institutional repositories. *Malaysian Journal of Library & Information Science*, 14(2), 17–37.
- Anne Kennan, M. (2011). Learning to share: Mandates and open access. *Library Management*, 32(4/5), 302–318.
- Armstrong, M. (2014). Institutional repository management models that support faculty research dissemination. *OCLC Systems & Services: International Digital Library Perspectives*, 30(1), 43–51. <https://doi.org/10.1108/OCLC-07-2013-0028>
- Baker, T. L. (1994). *Doing social research*. 2nd: McGraw-Hill Inc. Retrieved from http://isites.harvard.edu/fs/docs/icb.topic536767.files/W1_-_Baker_-_Doing_Social_Research.pdf
- BOAI. (2002). *Budapest Open Access Initiative*. New York. Retrieved from <http://www.budapestopenaccessinitiative.org/read>
- Boyatzis, R. E. (1998). *Transforming qualitative information: thematic analysis and code development*. Thousand Oaks, CA: Sage Publications.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bryman, A. (2015). *Social Research Methods*. Oxford University Press.
- Burns, C. S., Lana, A., & Budd, J. M. (2013). Institutional Repositories: Exploration of Costs and Value. *D-Lib Magazine*, 19(1/2). <https://doi.org/10.1045/january2013-burns>
- Callicott, B. B. (2015). *Making Institutional Repositories Work [electronic resource]*. Purdue University Press.
- Chowdhury, G. G. (2013). Sustainability of digital information services. *Journal of Documentation*, 69(5), 602–622. <https://doi.org/10.1108/JD-08-2012-0104>
- Chowdhury, G. G. (2014). *Sustainability of scholarly information*. London: Facet Publishing.

- Chowdhury, G. G. (2016). How to improve the sustainability of digital libraries and information Services? *Journal of the Association for Information Science and Technology*, 67(10), 2379–2391. <https://doi.org/10.1002/asi.23599>
- Costello, M. J., Appeltans, W., Bailly, N., Berendsohn, W. G., de Jong, Y., Edwards, M., Bisby, F. A. (2014). Strategies for the sustainability of online open-access biodiversity databases. *Biological Conservation*, 173, 155–165. <https://doi.org/10.1016/j.biocon.2013.07.042>
- Covey, D. T. (2009). Self-Archiving Journal Articles: A Case Study of Faculty Practice and Missed Opportunity. *Portal: Libraries and the Academy*, 9(2), 223–251. <https://doi.org/10.1353/pla.0.0042>
- Cullen, R., & Chawner, B. (2010). Institutional repositories: assessing their value to the academic community. *Performance Measurement and Metrics*, 11(2), 131–147. <https://doi.org/10.1108/14678041011064052>
- Cullen, R., & Chawner, B. (2011). Institutional Repositories, Open Access, and Scholarly Communication: A Study of Conflicting Paradigms. *The Journal of Academic Librarianship*, 37(6), 460–470. <https://doi.org/10.1016/j.acalib.2011.07.002>
- Direktorat Jenderal, P. T. (2014). Direktori PT. Retrieved 16 April 2017, from <http://forlap.dikti.go.id/perguruantinggi>
- Dorner, D. G., & Revell, J. (2012). Subject librarians' perceptions of institutional repositories as an information resource. *Online Information Review*, 36(2), 261–277. <https://doi.org/10.1108/14684521211229066>
- Eschenfelder, K. R., Shankar, K., Williams, R., Lanham, A., Salo, D., & Zhang, M. (2016). What are we talking about when we talk about sustainability of digital archives, repositories and libraries? *Proceedings of the Association for Information Science and Technology*, 53(1), 1–6. <https://doi.org/10.1002/pra2.2016.14505301148>
- Farida, I., Tjakraatmadja, J. H., Firman, A., & Basuki, S. (2015). A conceptual model of Open Access Institutional Repository in Indonesia academic libraries: Viewed from knowledge

- management perspective. *Library Management*, 36(1/2), 168–181.
<https://doi.org/10.1108/LM-03-2014-0038>
- Flick, U. (2014). *An introduction to qualitative research* (Fifth edition.). Los Angeles: Sage.
- Foxall, K., & Nailor, A. (2016). Sustainability in open access publishing: The ecancer case study. *Learned Publishing*, 29(2), 113–117. <https://doi.org/10.1002/leap.1023>
- Galletta, A. (2013). *Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication*. NYU Press.
- Gargouri, Y., Lariviere, V., Gingras, Y., Brody, T., Carr, L., & Harnad, S. (2012). Testing the Finch Hypothesis on Green OA Mandate Ineffectiveness. Retrieved from
<http://arxiv.org/abs/1210.8174>
- Ghosh, M. (2011). Advocacy for open access: a selected review of the literature and resource list. *Library Hi Tech News*, 28(2), 19–23. <https://doi.org/10.1108/07419051111135245>
- Guest, G. A. (2012). *Applied thematic analysis*. Place of publication not identified Sage Publications.
- Hall, N., Arnold-Garza, S., Gong, R., & Shorish, Y., (2016). Leading by Example? ALA Division Publications, Open Access, and Sustainability. *College & Research Libraries*, 77(5), 654–667.
<https://doi.org/10.5860/crl.77.5.654>
- Harnad, S., (2015). Optimizing Open Access Policy. *Serials Librarian*, 69(2), 133–141.
<https://doi.org/10.1080/0361526X.2015.1076368>
- Houghton, J. W. (2010). Economic Implications of Alternative Publishing Models: Self-archiving and Repositories. *LIBER Quarterly*, 19(3–4). <https://doi.org/10.18352/lq.7966>
- Jones, R. (2006). *The institutional repository*. Oxford: Chandos.
- Kamraninia, K., & Abrizah, A. (2010). Librarians' role as change agents for institutional repositories: A case of Malaysian academic libraries. *Malaysian Journal of Library & Information Science*, 15(3), 121–133.
- Kim, J. (2010). Faculty self-archiving: Motivations and barriers. *Journal of the American Society for Information Science and Technology*, 61(9), 1909–1922. <https://doi.org/10.1002/asi.21336>

- Kyriaki-Manessi, D., Koulouris, A., Giannakopoulos, G., & Zervos, S. (2013). Exploratory Research Regarding Faculty Attitudes towards the Institutional Repository and Self Archiving. *Procedia - Social and Behavioral Sciences*, 73, 777–784. <https://doi.org/10.1016/j.sbspro.2013.02.118>
- Lagzian, F., Abrizah, A., & Wee, M. C. (2015). Critical success factors for institutional repositories implementation. *The Electronic Library; Oxford*, 33(2), 196–209.
- Lee-Hwa, T., Abrizah, A., & Noorhidawati, A. (2013). Availability and visibility of open access digital repositories in ASEAN countries. *Information Development*, 29(3), 274–285.
<https://doi.org/10.1177/0266666912466754>
- Liau, T. T., & Genoni, P. (2017). A Different Shade of Green: A Survey of Indonesian Higher Education Institutional Repositories. *Journal of Librarianship and Scholarly Communication*, 4(0).
<https://doi.org/10.7710/2162-3309.2136>
- Longhurst, R. (2009). Interviews: In-depth, semi-structured.
- Mackie, M. (2004). Filling institutional repositories: practical strategies from the DAEDALUS Project. *Ariadne*, (39). Retrieved from <http://www.ariadne.ac.uk/issue39/mackie?quot%3B=>
- Mamtora, J., Yang, T., & Singh, D. (2015). Open access repositories in the Asia–Oceania region: Experiences and guidelines from three academic institutions. *IFLA Journal*, 41(2), 162–176.
<https://doi.org/10.1177/0340035215582219>
- Manjunatha K, & K. Thandavamoorthy. (2011). A study on researchers attitude towards depositing in institutional repositories of universities in Karnataka (India). *International Journal of Library and Information Science*, 3(6), 107–115.
- Marsh, R. M. (2015). The role of institutional repositories in developing the communication of scholarly research. *OCLC Systems & Services: International Digital Library Perspectives*, 31(4), 163–195. <https://doi.org/10.1108/OCLC-04-2014-0022>
- Morrison, H., & Waller, A. (2008). Open access and evolving scholarly communication: An overview of library advocacy and commitment, institutional repositories, and publishing in Canada.
Retrieved from
http://summit.sfu.ca/system/files/iritems1/469/C%2526RL_News_published_version.pdf

- Nykanen, M. (2011). Institutional Repositories at Small Institutions in America: Some Current Trends. *Journal of Electronic Resources Librarianship*, 23(1), 1–19.
<https://doi.org/10.1080/1941126X.2011.551089>
- Oguz, F. (2016). Organizational Influences in Technology Adoption Decisions: A Case Study of Digital Libraries | Oguz | College & Research Libraries. *College & Research Libraries*, 77(3), 314–334.
<https://doi.org/https://doi.org/10.5860/crl.77.3.314>
- Oguz, F., & Assefa, S. (2014). Faculty members' perceptions towards institutional repository at a medium-sized university: Application of a binary logistic regression model. *Library Review*, 63(3), 189–202. <https://doi.org/10.1108/LR-07-2013-0088>
- OpenDOAR. (n.d.). OpenDOAR - Open Access Countries and Organisations - Asia. Retrieved 14 July 2017, from <http://www.opendoar.org/countrylist.php?cContinent=Asia#Indonesia>
- Parsons, J. (2017, March 29). Open Access: advocacy. Retrieved 1 April 2017, from <http://lj.libraryjournal.com/2017/03/oa/open-access-advocacy/>
- Pinfield, S. (2005). A mandate to self archive? The role of open access institutional repositories. *Serials*, 18(1), 30–34.
- Poynder, R. (2017). Copyright: the immovable barrier that open access advocates underestimated. *Open and Shut*. Retrieved from <http://www.richardpoynder.co.uk/Copyright.pdf>
- Price, E., Engelson, L., Vance, C., Richardson, R., & Henry, J. (2016). Open access and closed minds? *Open Access and the Future of Scholarly Communication: Policy and Infrastructure*, 9, 67.
- Priyanto, I. (2015). *Readiness of Indonesian academic libraries for open access and open access repositories implementation: A study on Indonesian open access repositories registered in OpenDOAR*. ProQuest Dissertations Publishing. Retrieved from <http://search.proquest.com/docview/1776621941/>
- Puskas, S. E. (2011). *The effects of open access mandates on institutional repositories in the UK and Germany*. Retrieved from <https://dspace.lboro.ac.uk/2134/9327>
- Quinn, B. (2010). Reducing Psychological Resistance to Digital Repositories. *Information Technology & Libraries*, 29(2), 67–75.

- Rajamanickam, M. (2001). *Statistical Methods in Psychological And Educational Research*. Concept Publishing Company.
- Rieger, O. Y. (2011). Assessing the Value of Open Access Information Systems: Making a Case for Community-Based Sustainability Models. *Journal of Library Administration*, 51(5–6), 485–506.
<https://doi.org/10.1080/01930826.2011.589354>
- Ritchie, J., & Lewis, J. (2003). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. SAGE.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York: Free Press.
- Stanton, K. V., & Chern, L. L. (2011). Open access theses in institutional repositories: an exploratory study of the perceptions of doctoral students. *Information Research*, 16(4). Retrieved from <http://www.informationr.net/ir/17-1/paper507.html>
- Stewart, N. (2013). Top-down mandates and advocacy will help institutional repositories continue to enhance open access content and delivery. Retrieved from http://eprints.lse.ac.uk/56826/1/__lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_Stewart%2C%20N_Top-down%20mandates_Stewart_Top-down%20mandates_2014.pdf
- Suber, P. (2012). *Open access*. Cambridge, Mass.: MIT Press.
- Swan, A. (2012). *Policy Guidelines for the Development and Promotion of Open Access ; Open Guidelines Series*. United Nations Educational, Scientific and Cultural Organization UNESCO.
Retrieved from <http://digital.library.unt.edu/ark:/67531/metadc141806/>
- Swanepoel, M. (2005). Digital Repositories: All Hype and No Substance? *New Review of Information Networking*, 11(1), 13–25. <https://doi.org/10.1080/13614570500268290>
- van Nes, F., Abma, T., Jonsson, H., & Deeg, D. (2010). Language differences in qualitative research: is meaning lost in translation? *European Journal of Ageing*, 7(4), 313–316.
<https://doi.org/10.1007/s10433-010-0168-y>

- Wahid, F. (2011, August 2). "Menggugat" Webometrics. *Kedaulatan Rakyat*. Retrieved from <https://fathulwahid.wordpress.com/2011/08/02/%e2%80%9cmenggugat%e2%80%9d-webometrics/>
- Wedhaswary, I. D. (2012, March 1). Berat, Persyaratan Universitas Riset. Retrieved 18 July 2017, from <http://edukasi.kompas.com/read/2012/01/03/13300389/Berat.Persyaratan.Universitas.Riset>
- Wirba Singeh, F., Abrizah, A., & Harun Abdul Karim, N. (2013). Malaysian authors' acceptance to self-archive in institutional repositories: Towards a unified view. *The Electronic Library*, 31(2), 188–207. <https://doi.org/10.1108/02640471311312375>
- Wu, M. (2015). The Future of Institutional Repositories at Small Academic Institutions: Analysis and Insights. *D-Lib Magazine*, 21(9/10). <https://doi.org/10.1045/september2015-wu>
- Xia, J., Gilchrist, S. B., Smith, N. X. P., Kingery, J. A., Radecki, J. R., Wilhelm, M. L., ... Mahn, A. J. (2012). A Review of Open Access Self-Archiving Mandate Policies. *Portal: Libraries and the Academy*, 12(1), 85–102. <https://doi.org/10.1353/pla.2012.0000>
- Xia, J., & Sun, L. (2007). Assessment of Self-Archiving in Institutional Repositories: Depositorship and Full-Text Availability. *Serials Review*, 33(1), 14–21. <https://doi.org/10.1080/00987913.2007.10765087>
- Yang, Z., & Li, Y. (2015). University faculty awareness and attitudes towards open access publishing and the institutional repository: A case study. *Journal of Librarianship and Scholarly Communication*, 3(1), 5.
- Yin, R. K. (2015). *Qualitative Research from Start to Finish*. Guilford Publications.
- Zhang, H., Boock, M., & Wirth, A. (2015). It Takes More than a Mandate: Factors that Contribute to Increased Rates of Article Deposit to an Institutional Repository. *Journal of Librarianship and Scholarly Communication*, 3(1). <https://doi.org/10.7710/2162-3309.1208>

Appendices

Appendix 1: Interview schedule for participants

1. Can you tell me the history of your institution's OAIR?
2. How did you implement your OAIR? Was it mostly for internal users or did you also provide the access for external users?
3. How is the response of the university management?
4. What level of OA awareness exists among the library staff?
5. How did you promote the OA initiative to the different stakeholders (university management, academics, and students)?
6. Who was involved in the advocacy?
7. What were the main messages that you delivered during the advocacy process?
8. How successful were the advocacy programmes?
9. What are types of support provided by the university management to help the sustainability of IR?
10. If the University offers several types of support for the IR, which are the most important aspects that contribute to the sustainability of IR?
11. How is the reception of OAIR among academics and students?
12. What kinds of improvement in the use of IR that have been made so far? (e.g. a significant increase of visitors)
13. What are your plans for future improvement of IR?
14. How do you evaluate your IR performance?
15. What do you think as the main barriers in developing and managing IR? What have you done to resolve those barriers?

Appendix 2: Examples of coding

Data item (Participant PA1)	Initial codes	Categories	Themes
<p>Terkait isu Open Access (OA) ini mungkin ada baiknya saya ceritakan dari awal sejarah didirikannya institutional repository (IR) di Perpustakaan UK Petra (Perpus UKP), yang kemudian diberi nama "Desa Informasi." Pada saat itu saya masih berstatus sebagai mahasiswa yang bekerja paruh waktu di Perpus UKP. Kepala Perpus UKP waktu itu (Ibu Arlinah Imam Rahardjo) memiliki ide untuk mendigitalisasi Skripsi/Tugas Akhir (TA) yang ada di Perpus UKP. Saat itu idenya masih sederhana, yaitu alih media dari hardcopy ke softcopy dan disimpan dalam media CD Rom.</p> <p>Saya mendapat tugas untuk memikirkan dan mempersiapkan digitalisasi Skripsi/TA ini. Dalam prosesnya kemudian saya mengusulkan agar media penyimpanan tidak menggunakan CD Rom karena akan mempersulit temu kembali informasinya. Disepakati untuk menggunakan server sebagai media penyimpanan dengan akses melalui jaringan, yang saat itu masih sebatas LAN (Local Area Network) karena di awal tahun 1990an Internet belum begitu dikenal di Indonesia.</p> <p>Perpus UKP melakukan safari ke fakultas/jurusan untuk mewacanakan Skripsi/TA digital dan akses publiknya (OA). Dari safari ini kami mengidentifikasi ada 2 faktor</p>	<p>Former head of library's idea</p> <p>Digitising printed thesis and dissertation</p> <p>Think thank in the team</p> <p>Way of storing the digital documents (the use of server)</p> <p>Promoting the digitisation programme to academics</p>	<p>Types of advocacy</p> <p>Reason for implementing</p> <p>Participants' role in the digitisation team</p> <p>Information retrieval</p> <p>Types of advocacy</p>	<p>Bottom-up approach</p> <p>Corporate information management</p> <p>Participant as the change aides</p> <p>Corporate information management</p> <p>Bottom-up approach</p>
<p>utama kekhawatiran para dosen terkait Skripsi/TA digital dan OA:</p> <ol style="list-style-type: none"> 1. Kekhawatiran bahwa karya-karya Skripsi/TA tersebut akan dijiplak (plagiasi) 2. Kualitas (mutu) dari karya-karya Skripsi/TA <p>Kami berupaya meredakan kekhawatiran akan plagiasi dengan menjelaskan bahwa sebagai institusi pendidikan tinggi UKP seharusnya lebih peduli (concern) akan kemungkinan plagiasi yang dilakukan oleh sivitasnya sendiri. Kekhawatiran akan plagiasi oleh pihak di luar UKP seharusnya tidak sampai menghambat akses publik ke karya-karya UKP. Pembukaan akses ke publik juga secara tidak langsung akan memberikan tekanan (pressure) tersendiri bagi para dosen pembimbing dan fakultas/jurusan untuk lebih memberi perhatian kepada kualitas dan kuantitas bimbingan ke mahasiswa, yang pada akhirnya akan berdampak pada kualitas dari Skripsi/TA itu sendiri. Kami beragumen bahwa pembukaan akses ke publik ini justru menjadi peluang bagi UKP untuk meningkatkan mutunya.</p> <p>Perpus UKP kemudian mengusulkan ke Pimpinan UKP untuk membentuk Tim Digitalisasi Skripsi/TA yang diketuai oleh salah seorang dosen senior. Anggota tim terdiri dari perwakilan dosen dari tiap fakultas, Pusat Penelitian (LPPM) Pusat Komputer, dan Perpustakaan. Tim bertugas merumuskan:</p> <ol style="list-style-type: none"> 1. Pedoman Tata Tulis Tugas Akhir Mahasiswa UKP (http://library.petra.ac.id/files/pedoman.pdf) 2. Kebijakan Akses ke Skripsi/TA digital 	<p>Fear of potential plagiarism</p> <p>The doubt over the quality of research outputs</p> <p>Counter-argument: academics should be more concerned about their students who commit to plagiarism</p> <p>Pressure for academics to supervise students better</p> <p>Digitisation Team which is responsible for drafting student guidebook to ETD document presentation</p> <p>Student handbook on ETD document presentation</p> <p>Access policy to IR collection</p>	<p>Barriers in OA gaining the mandate</p> <p>Barriers in OA gaining the mandate</p> <p>OA messages</p> <p>OA messages</p> <p>Pre-requisite for IR implementation</p> <p>Pre-requisite for IR implementation</p> <p>Pre-requisite for IR implementation</p>	<p>Fear of plagiarism</p> <p>The doubt over the quality of research outputs</p> <p>To combat plagiarism</p> <p>To improve the quality of research outputs</p> <p>Digitisation team</p> <p>Student handbook on ETD document presentation</p> <p>Access policy</p>

<p>Poin 1 perlu dilakukan karena dibutuhkan keseragaman (format dokumen, pembagian bab, sitasi, dll) minimal – tanpa menghambat kebebasan fakultas/jurusan dalam menentukan jumlah bab dan standar sitasi yang digunakan – agar proses digitalisasi dapat berjalan dengan baik. Terkait kebijakan akses, tim memutuskan untuk mengadopsi kebijakan “Terbuka Sebagian” yang diterjemahkan sebagai:</p> <ol style="list-style-type: none"> 1. Akses ke isi (content) dari dokumen dibuka penuh namun akses ke dokumen dibatasi. 2. Hanya Skripsi/TA dengan nilai minimal “B” yang aksesnya akan dibuka ke public <p>Poin 1 diimplementasikan oleh Perpus UKP dengan menggunakan document viewer, di mana publik bias membaca isi seluruh dokumen namun publik tidak bisa mengunduh dokumen (PDF) ke komputer masing-masing. Bila publik ingin mendapatkan dokumennya mereka harus mengisi form dan meminta Perpus UKP untuk mencetaknya. Selain masih adanya faktor kekuatan terkait plagiasi, kebijakan ini harus diakui juga dipengaruhi oleh faktor ekonomi. Seperti kita ketahui dahulu akses ke Skripsi/TA di semua perguruan tinggi Indonesia sangatlah dibatasi. Saat itu syarat untuk mengakses/menggunakan koleksi Skripsi/TA di UKP adalah:</p> <ol style="list-style-type: none"> 1. Memiliki surat pengantar dari fakultas/jurusan 2. Memiliki surat pengantar dari dosen pembimbing bila akan memfotokopi (FC) Skripsi/TA 3. FC hanya bisa dilakukan untuk x halaman berurutan atau Y halaman tidak berurutan 4. FC dilakukan oleh petugas perpustakaan dengan biaya yang lebih mahal daripada biaya FC umumnya 	<p>The need to standardise the ETD in order to gain good quality of deposits</p> <p>Semi OA adoption(view-only mode)</p> <p>ETD with A/B grades</p> <p>Fear of plagiarism</p> <p>The need for monetising the printing service</p> <p>Access to printed thesis and dissertation in Indonesia is used to be heavily restricted</p>	<p>Pre-requisite for IR implementation</p> <p>Model of adoption</p> <p>Publication policy</p> <p>Barriers in OA gaining the mandate</p> <p>Reason for semi OA</p> <p>Road to OAIR adoption</p>	<p>Corporate information management</p> <p>Semi OA</p> <p>Gaining public image</p> <p>Reason for semi OA: fear of plagiarism</p> <p>Economic aspects</p> <p>Restriction to ETD in the past</p>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>Sepengetahuan saya, semua aturan lama tersebut – seperti halnya di kampus-kampus lain – dibuat memang untuk membatasi akses karena kekuatan terjadinya plagiasi. Nah tim tidak ingin Perpus UKP kehilangan ‘pendapatan’ dari biaya FC Skripsi/TA tersebut. Meski Perpus UKP tidak melihat hal ini sebagai hal yang ideal namun hal ini dinilai sebagai kompromi yang bisa diterima semua pihak.</p> <p>Seiring dengan makin dikenalnya Internet di Indonesia, pada tahun 1995 UK Petra terkoneksi ke Internet. Hal pertama yang dilakukan oleh Perpus UKP adalah mengkoneksikan OPAC (Online Public Access Catalog) – yang waktu itu masih berbasis teks (text-based) – ke Internet. Perkembangan ini sekaligus juga menginspirasi Perpus UKP untuk membuka akses publik ke koleksi digital Skripsi/TA. Sekembalinya saya dari studi lanjut pada tahun 2003 akhir saya diangkat menjadi Kepala Perpus UKP dan tahun 2004 Perpus UKP meluncurkan Digital Theses. Saat itu hal ini merupakan hal yang fenomenal karena kampus-kampus lain (bahkan kampus negeri) masih sangat membatasi akses ke koleksi Skripsi/TA.</p> <p>Seiring dengan berjalannya waktu koleksi digital yang dimiliki Perpus UKP berkembang dengan mengikutsertakan jenis-jenis karya non-Skripsi/TA, misal artikel-artikel dari jurnal-jurnal DIMENSI yang diterbitkan oleh Pusat Penelitian (LPPM), karya dosen/mahasiswa terkait perkuliahan (tematik), dokumen-dokumen terkait Surabaya, dll. Pada tahun 2005 Perpus UKP meluncurkan “Desa Informasi” yang memperkenalkan digital IR sebagai sebuah system</p>	<p>A form of compromising, even it is not an ideal way</p> <p>Made use of the internet to publish and disseminate the ETD collection</p> <p>Implementing the IR</p> <p>Improve the variety of collection</p>	<p>Participant’s view on semi OA adoption</p> <p>Internet as a tool or information management</p> <p>Pioneer in Indonesian OAIR</p> <p>Improvement programme</p>	<p>Semi OA as win win situation for the library and the university</p> <p>Corporate information management</p> <p>Institutional reputation</p> <p>Continuous improvement</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>pengelolaan dokumen dan karya sivitas UKP. Koleksi tematik yang ada di Desa Informasi saat ini adalah:</p> <ol style="list-style-type: none"> 1. Digital Theses: Skripsi/TA, Tesis dan Disertasi 2. eDIMENSI: artikel dari jurnal-jurnal DIMENSI 3. Petra Chronicle: dokumen yang sifatnya institutional documents terkait UKP 4. Petra iPoster: poster-poster karya sivitas UKP dan/atau terkait UKP (bagian dari Petra Chronicle namun diperlakukan sebagai koleksi tersendiri) 5. Surabaya Memory: dokumen dari UKP maupun pihak luar terkait Surabaya 6. Chinese Indonesians: dokumen dari UKP maupun pihak luar terkait topik komunitas Tionghoa di Indonesia <p>Nah dengan kisah di atas sebagai background ☺ kembali ke pertanyaan pesan ke pihak manajemen (termasuk Pimpinan) UKP saat awal-awal mengadvokasi OA adalah:</p> <ol style="list-style-type: none"> 1. OA baik bagi UKP secara institusi dalam hal memfasilitasi peningkatan mutu proses belajar mengajar, penelitian, abdimas, dan manajemen. 2. OA baik sebagai bentuk keterbukaan UKP sekaligus sebagai bentuk akuntabilitas UKP secara institusional ke masyarakat. 3. OA menyediakan peluang bagi UKP untuk assume leadership role di komunitas perguruan tinggi Indonesia (be the first to provide public access) 4. OA akan membentuk persepsi positif bagi UKP di masyarakat secara umum. 	<p>Improving the quality of teaching, research, and community service, and management</p> <p>Public accountability</p> <p>Leadership role in research openness</p> <p>Improving public image</p>	<p>Main messages</p> <p>Main messages</p> <p>Main messages</p> <p>Main messages</p>	<p>Corporate information management</p> <p>Main messages: Public accountability</p> <p>Institutional reputation</p> <p>Institutional reputation and image</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------

Appendix 3: Consent form for participants

Title of Research Project: Advocating for open access: open access advocacy practices in Indonesian higher education institutions and their implications on the sustainability of institutional repositories

Name of Researcher: Ari Zuntriana

Participant Identification Number for this project:

Please initial box

1. I confirm that I have read and understand the information sheet dated.....explaining the above research project and I have had the opportunity to ask questions about the project. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline. ☐
3. I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research. ☐
4. I agree for the data collected from me to be used in future research ☐
5. I agree to take part in the above research project. ☐

Name of Participant (or legal representative)	Date	Signature

Name of person taking consent (if different from lead researcher)	Date	Signature

To be signed and dated in presence of the participant

Lead Researcher	Date	Signature

To be signed and dated in presence of the participant

Copies:

Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/pre-written script/information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be placed in the project's main record (e.g. a site file), which must be kept in a secure location.

Appendix 4: Confirmation of ethics approval



Downloaded: 02/06/2017

Approved: 31/05/2017

Ari Zuntriana

Registration number: 160105269

Information School

Programme: INF6000

Dear Ari

PROJECT TITLE: Advocating for open access: an investigation of open access advocacy practices in Indonesian higher education institutions and their implications on the sustainability of institutional repositories

APPLICATION: Reference Number 014350

On behalf of the University ethics reviewers who reviewed your project, I am pleased to inform you that on 31/05/2017 the above-named project was **approved** on ethics grounds, on the basis that you will adhere to the following documentation that you submitted for ethics review:

- University research ethics application form 014350 (dated 21/05/2017).
- Participant information sheet 1030697 version 3 (21/05/2017).
- Participant consent form 1030698 version 2 (21/05/2017).

If during the course of the project you need to [deviate significantly from the above-approved documentation](#) please inform me since written approval will be required.

Yours sincerely

Matt Jones
Ethics Administrator
Information School

Information School
Address & First Employment Destination Details

Name:	ARI ZUNTRIANA
Programme:	MA Librarianship
Registration No:	160105269

CONFIRMATION OF ADDRESS

The University student record system has the capability to record up to three different addresses for you at any one time: HOME address, TERM-TIME address and CORRESPONDENCE address.

Please note that the University and the School will use the details on your **HOME** address record when posting out information to you, e.g. Statement of Results, Notification of Degree Results, Degree Ceremony information etc. It is therefore **YOUR RESPONSIBILITY** to ensure this address information is up to date so that communications we post to you get to you.

However, if you know that you will be staying at a temporary/other address rather than your home address after completing the programme, and you wish correspondence to be sent to this temporary/other address it is **YOUR RESPONSIBILITY** to add the address details to the **CORRESPONDENCE** address on your student record. If you have provided a Correspondence address this will be used instead of the Home address to post out communications to you. (See www.shef.ac.uk/ssid/record/correspondence.html for more information) The Schools **will not** send out correspondence to your **TERM** address once you have completed your studies with us.

You can check and update all your address information by logging on to the SSID website at www.shef.ac.uk/ssid/record/pin.html. You will need your UCARD PIN number to access your student record.

I confirm that I have checked, and updated if necessary, my HOME address details on my University student record	<i>tick to confirm</i> ✓
I wish correspondence to go to a temporary/other address and not my Home address, and I have therefore provided CORRESPONDENCE address details on my University student record.	<i>tick to confirm</i> ✓

Alumni Information

I agree that the Information School may pass details regarding the result of my degree to the relevant Professional Body Organizations for the purposes of assisting these organisations in deciding my eligibility for the award of professional accreditation.	<i>tick to agree</i> ✓
I would like my name to go on the School's Alumni webpage. I would like my name and email address to go on the School's Alumni webpage My email address is ari.zuntriana@uin-malang.ac.id (please do not use your Sheffield University email address)	<i>tick to agree</i> ✓ <i>tick to agree</i> ✓
I would like to be forwarded details of any job vacancies received by the School. My email address is _____ (please do not use your Sheffield University email address)	<i>tick to agree</i> <input type="checkbox"/>

First Employment Destination Details for School Records

It is very important that we receive information on how and where students have gained their first employment after finishing their programme of study with the Information School. Prospective and current students find it very useful to know the types of jobs/sectors that graduates of our programmes can expect to go into and we provide summarised information on the School website at www.shef.ac.uk/is/careers for each separate programme. The School also has to provide a summary report to the University Faculties on first destinations as part of Teaching Quality Assessment, Therefore any updated information you can give us is vital and very much appreciated.

Employer's name and address (inc. telephone number and email if available):	<p>Faizuddin Harliansyah, MIM</p> <p>The Library of UIN Maulana Malik Ibrahim Malang Jalan Gajayana 50 Malang Jawa Timur, Indonesia 65144</p> <p>Phone: +62-341-573411</p>
Job Title:	Academic librarian
Brief Job Description:	I used to work as a coordinator at the library technical services unit. My responsibility was leading the team to manage the library's new collection.
Starting Date:	1 November 2009
Please tell us where you saw this post advertised:	The university website

Is this employment: Full-time or Part-time	Is this employment: Permanent or Temporary	Are you returning to an existing post: YES or NO
----------------------------------------------------------	----------------------------------------------------------	----------------------------------------------------------------

Would you be interested in participating in careers talks within the iSchool? My email address is _____ (please do not use your Sheffield University email address)	<i>tick to agree</i> <input type="checkbox"/>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------

Signed  Date 01-09-2017



The
University
Of
Sheffield.

Information
School.

Access to Dissertation

A Dissertation submitted to the University may be held by the Department (or School) within which the Dissertation was undertaken and made available for borrowing or consultation in accordance with University Regulations.

Requests for the loan of dissertations may be received from libraries in the UK and overseas. The Department may also receive requests from other organisations, as well as individuals. The conservation of the original dissertation is better assured if the Department and/or Library can fulfill such requests by sending a copy. The Department may also make your dissertation available via its web pages.

In certain cases where confidentiality of information is concerned, if either the author or the supervisor so requests, the Department will withhold the dissertation from loan or consultation for the period specified below. Where no such restriction is in force, the Department may also deposit the Dissertation in the University of Sheffield Library.

To be completed by the Author – Select (a) or (b) by placing a tick in the appropriate box

If you are willing to give permission for the Information School to make your dissertation available in these ways, please complete the following:

- ☒ (a) Subject to the General Regulation on Intellectual Property, I, the author, agree to this dissertation being made immediately available through the Department and/or University Library for consultation, and for the Department and/or Library to reproduce this dissertation in whole or part in order to supply single copies for the purpose of research or private study
- ☐ (b) Subject to the General Regulation on Intellectual Property, I, the author, request that this dissertation be withheld from loan, consultation or reproduction for a period of [] years from the date of its submission. Subsequent to this period, I agree to this dissertation being made available through the Department and/or University Library for consultation, and for the Department and/or Library to reproduce this dissertation in whole or part in order to supply single copies for the purpose of research or private study

Name Ari Zuntriana

Department Information School

Signed

Date 01/09/2017

To be completed by the Supervisor – Select (a) or (b) by placing a tick in the appropriate box

- ☐ (a) I, the supervisor, agree to this dissertation being made immediately available through the Department and/or University Library for loan or consultation, subject to any special restrictions (*) agreed with external organisations as part of a collaborative project.

**Special
restrictions*

- ☐ (b) I, the supervisor, request that this dissertation be withheld from loan, consultation or reproduction for a period of [] years from the date of its submission. Subsequent to this period, I, agree to this dissertation being made available through the Department and/or University Library for loan or consultation, subject to any special restrictions (*) agreed with external organisations as part of a collaborative project

Name

Department

Signed

Date

THIS SHEET MUST BE SUBMITTED WITH DISSERTATIONS BY DEPARTMENTAL REQUIREMENTS.