

Title: Quantifying the value of a University electronic press

Content stream: Content edge

Abstract

Contemporary scholarly environments are subject to shifting technological, governmental, educational and legal drivers. There are new scholarly knowledge streams replacing traditional academic products - both outputs (publishing) and inputs (resources). The concept of a University Press is not new, however library-based electronic publishing is gaining momentum. There is a trend to link existing library skills and systems with institutional imperatives of deepening engagement and impact through curation and promotion of the work of their scholars and researchers. The barriers to entry in the electronic publishing market continue to drop and increasingly, the push for open access scholarship encourages Universities to offer publishing services.

The Griffith University ePress was established in 2009 to publish open access, peer-reviewed journals. In 2014, the ePress published five active titles, all of which have editors affiliated with the University. Resourcing is provided by the Division of Information Services (of which the library is a part). The aim of establishing the ePress was to increase open access to research findings and better serve scholars in research assessment exercises, especially in emerging disciplines. The time has come to gather the evidence: Has the Griffith University ePress met its aims? Can we quantify the value of the ePress? Is it sustainable? The business model relies heavily on being subsidised through existing library budget and staffing and service structures. What are the real economic and resource costs of the service? Are there emerging options and solutions that need to be considered? Can economies of scale be achieved?

A case study of the Griffith University ePress is used to determine contribution to institutional performance in the national research assessment exercise. The case study also establishes the total cost of ownership for the ePress; derives a per-unit cost to analyse the impact of scale; and compares the service cost with alternative library-based services: funding article processing charges and traditional journal subscriptions. While library as publisher would seem a good fit, evidence-based analysis is required to ensure the provision of a digital publishing service which is economically worthwhile, sustainable and adding value.

Introduction

Griffith University is Australia's ninth largest higher education provider. It is a large multi-campus institution with internationally recognised strengths in teaching and research. Griffith now offers more than 300 degrees across five campuses and is home to more than 43,000 students from 131 countries.

Griffith's research strengths range from the creative arts, social sciences, and humanities to science, engineering and health. The University exhibits national and world leading excellence in areas of strategic focus that include water science, criminology, health and chronic diseases, drug discovery, quantum physics, climate change adaptation, music, sustainable tourism and political science.

Fundamental to Griffith's aspiration to be a university of influence is the process of scholarly communication. The Information Management portfolio within the Division of Information

Services was created in response to the changing role of the Library as a leader in information management. As we move to a predominantly digital information environment the boundaries between records management, information management, library resource management and data management are blurring. The Library's role is shifting from being a procurer of content to being the lessee of content; and the manager, curator and publisher of content. This portfolio's role is to provide leadership in the management of information to ensure its contribution to the broader university experience.

Changing political economy of publishing

"In the conventional scholarly publishing model, a 'stable' triangle has been established among key players through years of practice.....In fact, to achieve the dissemination of scholarship, symbiotic relationships exist among researchers, publishers and libraries. For many years, this has been the norm of scholarly publishing, with the triangle consisting of researchers (to write, edit, review and read), publishers (to publish) and libraries (to subscribe and provide access)." (Zhao, 2014 p.8)

New scholarly communication environments and drivers, including open access initiatives have disrupted this stability. The disruption is large, on-going and volatile. Just one example, the open access author pays model (APC), removes the library from the triangle. What then for libraries? Is the library as publisher an increasingly important role to be exploited within a new scholarly publishing model? Where does the Griffith University ePress sit in this rapidly evolving landscape?

At Griffith University, the ePress service along with scholarly publishing literacy services and repository and data management services form a proactive suite supporting scholarly communications as part of a broader research support framework. As Steele (2014 p.23) advocates, "Libraries need to move from being a passive recipient of scholarship to engaging in a more active role in hosting and supporting scholarly publishing on their campuses".

The concept of a university press is not new, however library-based electronic open access publishing is gaining momentum as a reaction to journal price inflation. "As the chief benefactor of research within its walls, universities have long chafed at the notion that this research is given away to commercial entities, then repurchased at a premium" (Tananbaum, 2003 p.286-7). There are several models in play around Australia, the Griffith ePress model facilitates Faculty based, self-organised, not for profit, open publishing.

Griffith University ePress

Background

The Griffith University ePress was initiated in 2007 and established in 2009 after a two year pilot, to facilitate the publication of high quality peer-reviewed research and scholarship. A primary objective for the ePress service was to facilitate an increase in the amount of claimable peer-reviewed journal articles (C1s) by Griffith University in the Higher Education

Research Data Collection Scheme (HERDC) and Excellence in Research for Australia (ERA) research assessment exercises, especially in emerging disciplines. Griffith ePress is a Recognised Acceptable Commercial Publisher for the purpose of HERDC and ERA research assessment exercises.

In 2014, the ePress published five active and two inactive titles (see Table 1).

Table 1 Griffith University ePress titles

Title	ISSN	Start year	Frequency	Discipline
GovNet	-	2007	Biannually (inactive)	Social Science
Griffith University Undergraduate Psychology Journal	-	2009	Annually (inactive)	Social Science
Dancecult: journal of electronic dance music culture	1947-5403	2009 (published by Griffith University from 2013)	Biannually	Humanities
Journal of Social Inclusion	1836-8808	2010	Biannually	Humanities
Aeronautica	1838-7896	2011	Biannually	Science/Technology
Pneumonia	2200-6133	2012	Rolling publication	Health/Medicine
Griffith Asia Quarterly	2202-3917	2013	Quarterly	Social Science

Each of our five active titles have ISSNs and meet the definition of research and peer-review required to claim articles in the HERDC and ERA processes. ERA further requires a journal to be included in the ERA journal list. Only two of our titles are included in the draft 2015 ERA journal list.

Griffith University ePress is underpinned by Open Journal Systems (OJS), free open source journal management and publishing software produced by the Public Knowledge Project (PKP). OJS facilitates the main stages of issue creation:

1. Online manuscript submission by authors
2. Management of the peer-review process
3. Copy editing
4. Layout and publication

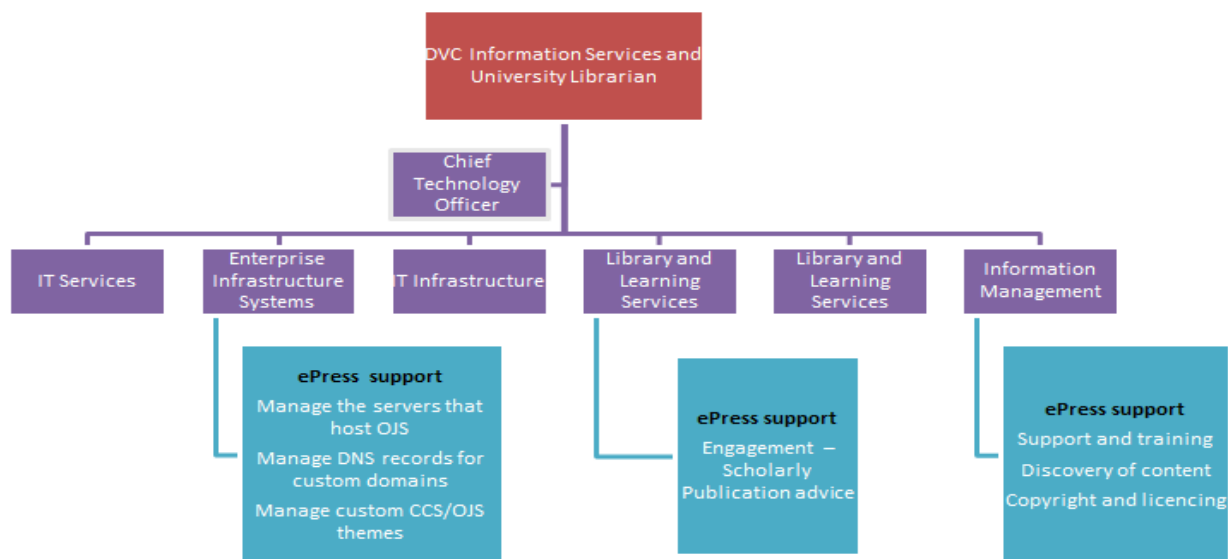
The software is locally hosted, and technical support is available and funded through the ePress service.

Resourcing and service model

Responsibility for the Griffith University ePress service sits within the Information Management portfolio where it is jointly supported by the Scholarly Resource Services and the Content and Discovery teams (See Figure 1). Resourcing of the service is provided by the Division of

Information Services as part of operational budgets across Scholarly Resource Services and the Content and Discovery teams. Ownership and resourcing of the titles published through the ePress service sits with Faculty sponsors. Every ePress title requires a Faculty sponsor who undertakes responsibility for publishing.

Figure 1 Division of Information Services structure



The Griffith ePress delivered through Information Services Division can be characterised under three broad service provisions:

1. IT systems and infrastructure
2. Business and content support
3. Access and archiving

More specifically, the Information Management portfolio ePress service provides the following:

Scholarly Resource Services	Content and Discovery Services
<ul style="list-style-type: none"> ● Journal setup and configuration ● Training on the use of OJS and peripheral systems ● Workflow support ● Advice on scholarly publishing including: <ul style="list-style-type: none"> ○ Open access publishing ○ ISSN application/registration ○ Copyright and licensing ○ Ethics ○ Funding sources. ● Manage catalogue records and data with knowledge base providers 	<ul style="list-style-type: none"> ● Fixed number of OJS themes ● Basic/limited web design/interface customisation (within OJS only) ● Develop and maintain OJS and peripheral systems ● Technical support ● Setup and maintain indexing in designated services (Google, Google Scholar, Trove, DOAJ and discovery layer) ● Setup and maintain content archiving with chosen provider ● Advice on peripheral systems including: <ul style="list-style-type: none"> ○ Additional indexing and

	abstracting services e.g. PubMed <ul style="list-style-type: none"> ○ Plagiarism detection software e.g. CrossCheck ● DOI deposit with CrossRef ● Facilitate registration and setup of custom journal domain names
--	--

There is no charge to Faculty sponsors for the base service, but there are costs and responsibilities born by the Faculty sponsor of the journals. These are further detailed below in the total cost of ownership results.

Faculty sponsors are expected to:

- Nominate a journal manager and key staff for contact and training.
- Undertake and fund all activities usually associated with journal publishing including:
 - Content solicitation
 - Peer-review
 - Editing
 - Layout
 - Proof-reading
 - Publishing of issues.
- Coordinate and fund web and graphic design work for the journal (over and above the base service).
- Coordinate and fund custom domain name registration.
- Comply with the requirements of our CrossRef membership by ensuring cross linking of references via DOI.
- Publish at regular and agreed intervals.

As quality and sustainability are important factors for achieving the ePress aims, the service has a number of criteria for title acceptance. Titles must

- Have an editor affiliated with the University;
- Be open access; and
- Be peer-reviewed.

Creative Commons CC BY licensing is recommended.

Case study methods

HERDC and ERA contribution

Articles published by the Griffith University ePress between 2010 and 2013 were examined to determine the number of research assessment exercise eligible outputs published by Griffith authors. Eligibility was based on the HERDC (2014) and ERA (2015) submission guidelines. The author's affiliation listed in the paper was used to determine if they met the eligible researcher requirements for ERA and affiliation requirements for HERDC.

Total cost of ownership

Total Cost of Ownership (TCO) is “a method of identifying and understanding all of the costs associated with the acquisition, use and support of ICT, with the aim of improving decision-making about future ICT investment and deployment” (JISC, 2009).

In determining the total cost of ownership for the ePress service this paper focuses on those costs directly borne by the Division of Information Services (INS). The unique nature of the long established and well-regarded INS which joins IT and library - platform/networks/systems and business alignment/content management/information services and support enables a valid cost attribution for these activities. Each of these systems and services have been costed as part of this case study.

Universities are innately decentralised and autonomous, especially in the area of research outputs and publication. Each of the Faculties that have an ePress journal fund these activities differently dependent on the level of support available and the purpose and priority of the journal for the Faculty. Commercial publishing costs primarily relate to formatting and distribution. Content production (writing, peer-reviewing, proof-reading and editing) is provided by academics whose work is paid for by other institutions or income sources (Beverungen, Bohm, & Land, 2012). As such the concentration of this paper on the INS based costs is valid.

We have used a simple monetary-based method to present the setup and delivery costs of the ePress service (see Table 2). Figures are based on the current service model and data from 2013, however it is worth noting that annual operating costs have fluctuated significantly over the five years of operation. Influencing factors include: number of titles published; quality/professionalism of titles published; technical ability of editorial staff; frequency of software development and upgrades; staffing levels; and service expansion, for example the introduction of Digital Object Identifiers (DOIs) in 2013.

To accurately calculate TCO, there is a need to understand hidden costs and the impact of the service on other business areas. Woodside, Gibbert, & Golfetto (2008) identify three elements required for thoroughness:

1. A map or diagram of all the related activities;
2. The identification of cost drivers; and
3. The allocation of costs based on the amount of activities and drivers.

We began with a business process map to identify all the activities associated with the service. This enabled us to identify the costs components. Activity based costing methods were used to determine activity costs where relevant.

Results

HERDC and ERA contribution

26% and 19% of eligible articles published by the ePress between 2010 and 2013 were claimable by Griffith University as part of HERDC and ERA respectively. The ePress contributes

less than 1% of the total number of articles claimed by Griffith University in these exercises. It should be noted that data collection specifications have varied over this period, so figures are indicative only. Furthermore, the count was not apportioned according to the number of authors. Our data suggests that claimable articles of the host institution generally decrease over the life of the journal. This is a logical progression; as a journal increases its prominence and prestige, it attracts more submissions from a broader audience resulting in higher rejection rates.

Total cost of ownership

All figures are in Australian Dollars (AUD) unless otherwise specified.

Table 2 ePress setup and delivery costs

Process	Cost component	INS	Faculty
IT Infrastructure	Software and workstations <ul style="list-style-type: none"> • \$1,464 (Dell OptiPlex 9030 All-In-One workstation + Standard Operating Environment (SOE) software) x 1 (number of workstations¹) / 3 years (lifecycle) • USD\$20 (CrossCheck annual membership fee) + USD\$1 x 2 (per item fee x number of checked items). • Non-SOE software² = \$2,250. 	\$510	\$2,250
	Software development and maintenance (includes OJS upgrades, patches and bug fixes) <ul style="list-style-type: none"> • \$140 (cost-recovery unit price) x 123 (hours)³ 	\$17,220	-
	Server and storage hardware and maintenance <ul style="list-style-type: none"> • \$50 (8GB Virtual CPU) x 2 (number of servers) • \$11,619 (server administration and support costs including backup processes) / 4 year contract • Ignoring physical server (sunk cost), electricity and failure expenses (negligible) 	\$3,005	-
Article production	First copy costs (includes editorial,	-	\$10,528

¹ Workstations and SOE software (such as Microsoft Word) used by INS and Faculty staff were considered a sunk cost and not included in the cost analysis, with the exception of dedicated positions/machines.

² Non-SOE software includes Adobe InDesign and Inera eXtyles NLM. As costs are commercial in confidence, they not been itemised.

³ The Information Management portfolio is internally charged on a cost-recovery basis for OJS development and maintenance.

	<p>management, copy editing, layout, and proofreading)</p> <ul style="list-style-type: none"> • \$188 (average cost for OJS produced articles⁴) x 56 (number of published items) 		
	<p>Content and business support (includes scholarly publishing advice; and technical support and training for editorial staff using OJS)</p> <ul style="list-style-type: none"> • \$90,936 (HEW Level 6, Step 2 salary + on-costs) x 100% (time) 	\$90,936	-
Access and archiving	<p>Custom domain registration</p> <ul style="list-style-type: none"> • \$20 (registration fee) x 2 (number of journals with custom domains) • Ignoring staffing expenses for administration and DNS record maintenance (negligible) 	-	\$40
	<p>CrossRef</p> <ul style="list-style-type: none"> • USD\$275 (annual membership fee) + USD\$1 x 56 (per item deposit fee x number of published items). • Assumed at parity exchange rate. 	\$331	-
	<p>Discovery (includes indexing, archiving and DOI registration/deposit)</p> <ul style="list-style-type: none"> • \$104,064 (HEW Level 7, Step 2 salary + on-costs) x 2% (time) • 2 percent time is about 40 minutes per week assuming the staff member works at 7.25 hours per day 5 days per week at 100 percent capacity. 	\$2,081	-
	<p>Web design</p> <ul style="list-style-type: none"> • \$104,064 (HEW Level 7, Step 2 salary + on-costs) x 1% (time) • 1 percent time is about 17 hours per year assuming the staff member works at 7.25 hours per day 5 days per week at 100 percent capacity. 	\$1,041	-

⁴ Average first-copy cost identified by Edgar & Willinsky (2010 p.15). Assumed at parity exchange rate.

TOTAL		\$115,124	\$12,818
--------------	--	------------------	-----------------

The process allows us to estimate the total cost of the ePress service as \$127,942. For 2013, this allows us to derive a per article cost of \$2,285.

Discussion

HERDC and ERA contribution

The aim of establishing the ePress was to increase open access to research findings and better serve scholars in research assessment exercises, especially in emerging disciplines. HERDC and ERA results are partially based on the volume and quality of a university's research publications.

“Since the 2008 global economic downturn and the recent national research funding cuts to the university sector, the Australian research environment has become tougher than ever (Creagh 2012; Robinson 2013). Within the Australian university sector, a significant proportion of research is supported through government funding (Kingsley 2013b). Several measures are implemented by the Australian Federal Government to provide accountability and ensure taxpayers' public money is invested strategically and wisely in research. The annual Higher Education Research Data Collection (HERDC) collects statistics of universities' research output and income. HERDC results are currently used to inform research funding allocations to universities”.... Hence much attention and emphasis have been placed on HERDC and ERA performance by universities.” (Zhao 2014 p.3)

The *Journal of Social Inclusion* is by far the biggest contributor to C1's and the success of this title appears to be its emphasis as a commons for practitioners and academics (pracademics) in the area of social work, disability and social inclusion. It is also well established and strongly supported within the Faculty.

A result of 26% justifies the investment in the ePress as a strategy to facilitating an increase in the amount of claimable peer-reviewed journal articles (C1s) by Griffith academics especially in emerging disciplines. However, the result is not spectacular and there are concerns over sustainability and scalability. The business model relies heavily on being subsidised through existing library budget and staffing and service structures within the Division and the Faculties.

Total cost of ownership

Contemporary scholarly environments are subject to shifting technological, government, educational and legal drivers. There are new scholarly knowledge streams replacing traditional academic products - both outputs (publishing) and inputs (resources). The barriers to entry in the electronic publishing market continue to drop and increasingly, the push for open access scholarship encourages new approaches.

Some libraries have opted to reimburse or fund Article Processing Charges (APCs) to assist/encourage/enable researchers to publish in open access journals. Griffith University library does not offer this service; researchers are expected to account for the expense in their grant applications.

Solomon & Björk (2012) calculated the average APC of open access journals listed in DOAJ as USD\$906. Subsequent work, based on established journals (at least two years old) indexed in Scopus, estimates a higher average, around USD\$1,418 (Björk & Solomon, 2014). According to Elsevier (2014) their APCs range between USD\$500 and \$5,000. Björk & Solomon (2014) note a correlation between APCs and impact factors. APCs are higher in Science/Technology/Medicine than Social Sciences (Solomon & Björk 2012).

Morrison (2013) estimates the average library spends USD\$4,326 per subscription article. The Griffith ePress cost of \$2,285 puts it as less than a per library subscription cost but more than an average APC cost. The current total cost of ownership is high when compared with alternatives; however economies of scale can be achieved.

The high ePress TCO is a result of the current service set-up and funding model. Factors such as the move to remote hosting, utilising INS staff to take on some publishing tasks which are pain points for Faculty and an increase in the volume of journals in the ePress, including supporting student journals, should impact on the TCO. These are all opportunities which Griffith will be investigating.

Griffith utilises hosting services for a range of services and platforms. “Shifting web applications to the cloud provides several technical advantages over locally managed servers. High availability, flexibility, and cost effectiveness are some of the most important benefits” (Han, 2012 p.205). Griffith is investigating a transition to remote hosting with PKP Publishing Services in 2015 in order to realise some of these benefits and reduce the total cost of ownership.

As well as the pure monetary analysis, it is important to recognise the tangible and intangible benefits of the ePress. These include the support of niche research and teaching fields; the provision of a platform for early career academics and students to enter the scholarly communication environment; and the positive contribution to Griffith’s performance in research assessment exercises.

Sustainability and measuring success

Library-based electronic publishing often begins with transitioning a print based journal to online, however at Griffith University our titles were all new journals or start-ups. This presents a number of unique and additional challenges in quantifying value. The Griffith business model relies heavily on set-up and support being subsidised through the existing library budget and staffing and service structures. Publishing costs associated with the content is born by the sponsoring Faculty (content solicitation; peer-review; editing; layout; proof-reading; publishing of issues).

Our first two forays into publishing, *GovNet* and *Griffith University Undergraduate Psychology Journal*, ceased after only a few issues/years. Contributing factors include ceased funding at the Faculty level; staff turnover; lack of high level Faculty support.

All our existing titles continue to struggle with:

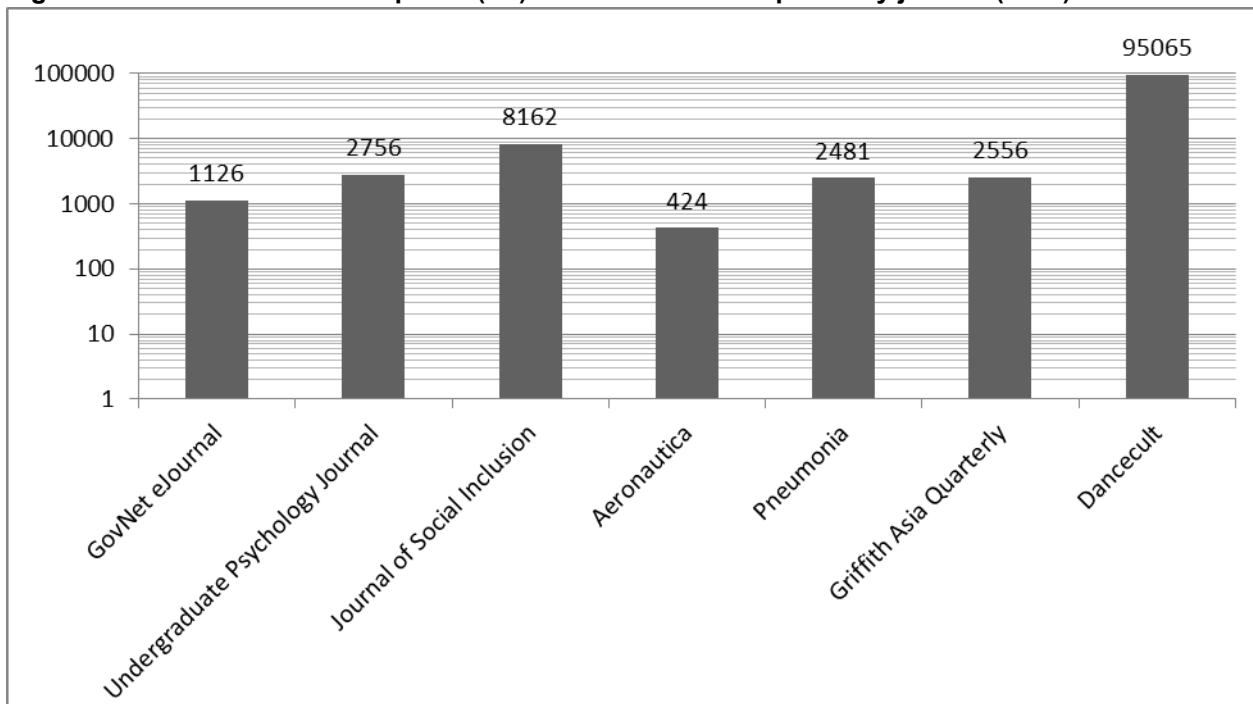
- Attracting quality content
- Funding
- Editorial/review staff
- Technology - capability and training gaps.

Even so, there is a demand for the ePress service with two forthcoming titles: *Journal of Alternative and Community Media* and *Griffith Journal of Law and Human Dignity*. The initial interest and enthusiasm for the benefits of publishing at the Faculty level remains strong. There are tensions/pressure on INS to broaden the scope of services offered and take on some of the publishing tasks such as layout and proofing services in order to facilitate sustainability.

Usage

Full text downloads vary significantly by title (see Figure 2). The focus on niche and emerging disciplines has been a key factor in the success of titles. *Dancecult* has the longest publishing history and publishes more articles per year than other titles, so this may partially account for their significantly higher download statistics. *Dancecult* fills a gap in the academic literature and this is reflected in its high usage rate.

Figure 2 COUNTER Journal Report 1 (R2): Full-text article requests by journal (2014)



Submissions received

One measure of the success of our journals comes from the number of manuscript submissions received. According to a survey by Edgar & Willinsky (2010) the majority of journals (52%) published using the OJS system are receiving between 1 and 10 submissions a month and produce 31 articles per year on average. Björk, Roos, and Lauri (2009) estimate ISI Web of Science journals produce 111 articles annually, compared with an average of 26 articles for journals not listed in ISI. Most Griffith University ePress titles fall considerably short of this (see Table 3). To some degree, this reflects the youth of the journals. Our longer established journals attract more content and produce more articles.

Table 3 Submissions received by Griffith University ePress journals (2014)

Title	Articles published	Total Submissions
Dancecult	26	38
Pneumonia	9	23
Journal of Social Inclusion	12	32
Aeronautica	0	0
Griffith Asia Quarterly	8	11

Acceptance of submissions

A further measure relating to the quality of journals comes from the acceptance rate for submissions, after the review process. The Edgar & Willinsky survey found an evenly distributed acceptance rate with the majority of journals adhering to a rate between 40-60%. This figure is supported by Houghton et al. (2009).

Griffith University ePress journals have higher than average acceptance rates, ranging from 65-100%. High acceptance rates tend to be associated with low-to-no budget journals, which are newer in origin and which are scholar published (Edgar & Willinsky, 2010).

Conclusion

Libraries have always adapted to evolving environments and changing needs of their clients. As Hahn (2008) has noted, "library-based publishing programs are pragmatic responses to evident needs, not services in search of clients". This is true for the Griffith experience. For Griffith the library as a publisher-enabler through the provision of a digital publishing service is a response to on-going demand. This first pass case study to quantify the value of the ePress to Griffith University has produced some answers but also uncovered a range of areas that require further investigation and analysis. The data has given us confidence that the ePress is delivering on its initial aspirations and more importantly it has given us some clear direction for improvements. The calculations put the Griffith ePress cost as less than a per library

subscription cost but more than an average APC cost. The current total cost of ownership for ePress titles is high when compared with library-based alternatives.

In order to gain economies of scale and achieve a reasonable average cost per article the Griffith ePress will need to increase its publication rate to at least 100 articles per year. To achieve this, three critical factors will need to be addressed. The first is ensuring title sustainability at the Faculty level; the second improving the quality and number of articles submitted and the third promotion of the service and titles to increase visibility and usage. Continued evidence-based analysis is required to ensure the provision of an appropriate and evolving digital publishing service is maintained. Documented sustainability plans and careful consideration of breadth and levels of service are critical.

Griffith ePress future planning will address on-going funding sources for both the INS components and the Faculty publishing components. Further consideration and strategies need to be developed to mature the processes and build robust publishing skills, knowledge and commitment at the Faculty title sponsorship level. The ePress service delivered through the Information Management portfolio of the Division of Information services is committed to taking the lead in building capacity across the institution and implementing sound business models.

References

Beverungen, Bohm, & Land. (2012). The poverty of journal publishing. *Organization*, 19(6), 929-938. doi:10.1177/1350508412448858

Björk, B., & Solomon, D. (2014). *Developing an effective market for open access processing charges*. Retrieved from http://www.wellcome.ac.uk/stellent/groups/corporatesite/@policy_communications/documents/web_document/wtp055910.pdf

Edgar, B. D., & Willinsky, J. (2010). A survey of scholarly journals using open journal systems *Scholarly and Research Communication*, 1(2), 1-22. Retrieved from <http://src-online.ca/index.php/src/article/view/24>

Elsevier (2014). *Pricing policy*. Retrieved from <http://www.elsevier.com/about/policies/pricing->

[policy](#)

- Hahn, K. L. (2008). Research Library Publishing Services: New Options for University Publishing. *Research on Institutional Repositories: Articles and Presentations*. Paper 37. Retrieved from <http://digitalcommons.bepress.com/repository-research/37>
- Houghton, J. W., Rasmussen, B., Sheehan, P. J., Oppenheim, C., Morris, A., Creaser, C., Greenwood, H., Summers, M., & Gourlay, A. (2009). *Economic implications of alternative scholarly publishing models: Exploring the costs and benefits*. A report to the UK Joint Information Systems Committee (JISC) with both UK- and Australia-based teams. Retrieved from <http://www.jisc.ac.uk/media/documents/publications/rpteconomicoapublishing.pdf>
- JISC. (2009). *Total cost of ownership*. Retrieved from http://www.jisc.ac.uk/whatwedo/programmes/programme_ios/project_tco.aspx
- Morrison. (2013). Economics of scholarly communication in transition. *First Monday*, 18(6) doi:10.5210/fm
- Solomon, D. J., & Björk, B. (2012). A study of open access journals using article processing charges. *Journal of the American Society for Information Science and Technology*, 63(8), 1485-1495. doi:10.1002/asi.22673
- Steele, C. (2014). Scholarly communication, scholarly publishing and university libraries. Plus ça change? *Australian Academic and Research Libraries*, 45(4), 241-261. doi: 10.1080/00048623.2014.950042
- Tananbaum, G (2003). Of wolves and boys: The scholarly communication crisis. *Learned Publishing*, 16(4), 285-289. doi:10.1087/095315103322422035
- Zhao, L. (2014). Riding the wave of open access: Providing library research support for scholarly publishing literacy. *Australian Academic and Research Libraries*, 45(1), 3-18. Retrieved from <http://search.proquest.com.libraryproxy.griffith.edu.au/docview/1541478128?pq-origsite=summon>