
QOAM SUSTAINABILITY PLAN

TOWARDS AN ECONOMIC MODEL FOR
QUALITY OPEN ACCESS MARKET

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Contents

- Management Summary 3
- 1. Introduction..... 3
- 2. QOAM: Facts and figures 5
 - 2.1 QOAM: What is it? 5
 - 2.2 Present state of QOAM 6
- 3. Developing an economic model..... 7
 - 3.1 Business canvas model..... 7
 - 3.2 Stakeholders analysis - value propositions..... 9
 - 3.2.1 Authors/researchers.....9
 - 3.2.2 Journal publishers.....9
 - 3.2.3 Research funders.....9
 - 3.2.4 Policy makers..... 10
 - 3.2.5 Libraries, universities and research performing organisations 10
- 4. From developmental to operational phase 12
 - 4.1 Positioning QOAM 12
 - 4.1.1 QOAM measures the quality of the services of journals..... 12
 - 4.1.2 Other infrastructures and services 13
 - 4.2 Next steps in the development 15
 - 4.2.1 Overall strategy recommended 15
 - 4.2.2 Suggestions regarding building volume 15
 - 4.2.3 Suggestions regarding functionality..... 15
 - 4.2.4 Suggestions regarding services 16
 - 4.2.5 Financial considerations 16
 - 4.3 Operational phase 17
 - 4.3.1 Steady-state 17
 - 4.3.2 Funding by libraries and journal publishers..... 17
 - 4.3.3 Legal entity..... 17

MANAGEMENT SUMMARY

A workshop with an international audience was held to discuss the possibilities for an economic model to sustain QOAM – the Quality Open Access Market. The business canvass model was used as a basis for the development of an economic model.

QOAM is set up and focused as service to authors. The website www.qoam.eu offers over 23,000 open access and hybrid journal titles. QOAM has 7300 score cards coming from libraries (4700) and authors (2600). The website offers a considerable range of functionalities to its users.

Based on the present state of QOAM the main conclusions of the workshop were as follows:

- **QOAM offers potentially important value propositions for a range of stakeholders:** the service is centred on the needs of authors/researchers. However, QOAM offers an important value proposition for research funders (e.g. making their OA policies work), to libraries (e.g. service to their authors and showcasing their license deals with journal publishers at a journal title level) and to OA publishers (e.g. greater visibility and credibility for their journals, leading to more submissions).
- **An additional two year development phase:** an additional two year period (2017 and 2018) for further developing QOAM is seen as necessary. The main objective during this period is building volume in terms of users and in terms of supporting communities of author/researchers and libraries/librarians. In addition, a number of suggestions were made regarding expanding the functionality of QOAM and possible new services by QOAM. Most importantly, a study of author's expectations towards journals was recommended. Research funding organisations were seen as the most plausible funders for this development phase.
- **Operational phase:** in the beginning of 2019, QOAM will be sufficiently developed to enter the operational phase. Libraries are seen as the most plausible funders for this phase, while a smaller revenue stream might be generated by sponsorships by journal publishers. QOAM should by then have developed a legal entity that reflects the principles for open access infrastructures. In order to facilitate funding by libraries, initiatives are underway to bundle related OA services for funding. QOAM might become partner in such a bundle. Another option for QOAM might be to merge with a related OA service.

1. INTRODUCTION

QOAM – Quality Open Access Market – has been founded in 2012 by two volunteers, Leo Waaijers and Saskia de Vries. With help from the Radboud University and SURFmarket they have set up an academic agora where libraries and authors work closely together. The development was made possible by a grant from the PICA foundation. The duration of this grant ends summer 2016. Therefore, the question of developing an economic model in order to sustain QOAM is urgent.

At June 1, 2016, an international workshop was held in Utrecht at the offices of SURF with 11 attendees from various countries to discuss the possibilities to develop an economic model to ensure the sustainability of QOAM (see textbox). Before, the participants were informed about various aspects of QOAM by a partly filled-out business canvas (see paragraph 3.1). The discussion focused on:

1. What are the stakeholders for QOAM?
2. What is the value proposition of QOAM for each stakeholder group?
3. What is the (estimated) willingness-to-pay for each stakeholders group?
4. What is/should be the positioning of QOAM in the landscape of OA infrastructure?
5. What steps are needed to realise an economic model for QOAM?
6. Which functionality has to be added to QOAM in view of the earlier defined value propositions for the various stakeholder groups?

This QOAM sustainability plan is based on the results of the discussions within this workshop and on the suggestions by many attendees on a draft version of this plan.

Attendees workshop

- Jan Velterop, Open Access advocate
- John Doove, SURFmarket and Knowledge Exchange
- Josh Brown, ORCID
- Katie Shamash, JISC
- Lars Bjoernshauge, DOAJ
- Laura Groenhuijzen, Radboud University
- Leo Waaijers, QOAM
- Maurits van der Graaf, Pleiade Management & Consultancy
- Pablo de Castro, LIBER and EuroCRIS
- Ralf Schimmer, Max Planck Institute
- Saskia de Vries, QOAM and Sampan

2. QOAM: FACTS AND FIGURES

2.1 QOAM: WHAT IS IT?

- **Marketplace for authors:** QOAM is a market place for scientific and scholarly journals that publish articles in Open Access. Quality scoring of the journals in QOAM is based on academic crowdsourcing, whereas the library community scores the transparency of the websites of the journals. QOAM aims at authors who want to publish their article in Open Access in a high quality journal and for a reasonable price. QOAM also mentions the publication fees of a journal. By the combination of quality and price a market arises, the Quality Open Access Market.
- **More than 23.000 Open Access and hybrid journals:** QOAM contains 23.450 journal titles, including Open Access journals and hybrid journals. The journal list is compiled from several sources, such as DOAJ and Ulrich's Periodicals Directory.
- **Two types of Journal Score Cards:**
 - **Base Score Card:** the Base Score Card scores the transparency of a journal's website with respect to four essential journal aspects: Editorial information, Peer review, Governance and Workflow. These scorecards are filled out by members of the library community.
 - **Valuation Score Card:** the Valuation Score Cards are filled out by members of the academic community, who have published in that particular journal.
- **Centred on the needs of authors:** authors who are looking to publish an Open Access article can search for journal titles in the discipline filter, select the most relevant titles in an individual space (my QOAM) and subsequently compare the quality scores and the prices for these journals. QOAM also contains specific price information that are a result of licensing deals between university libraries and publishers. If a potential author has made a selection of a journal to publish in, QOAM provides a direct link to the submission page of journals with a good score ('strong journal', see paragraph 2.2).
- **Public website:** QOAM is a public website. However, academics have to log in with their institutional email account for publishing a Journal Score Card (to avoid misuse) or if they want to contact a colleague who has also published a Journal Score Card for dialogue (in order to avoid spam).

2.2 PRESENT STATE OF QOAM

QOAM is still in development phase. The larger part of the functionality has been developed. With regard to the data, per 25 May 2016 QOAM has:

- 2777 registrants who filled out
- 4602 Base Score Cards (by library staff) for 3405 journals, and
- 2581 Valuation Score Cards (by authors) for 1079 journals.

Together, Base Score and Valuation Score determine the following SWOT matrix:

		Valuation Score	
		> 3	≤ 3
Base Score	> 3	Strong journal	Threat to author: (Journal may not meet its promises)
	≤ 3	Opportunity to publisher: (Improve the journal's web site)	Weaker journal

This has resulted in SWOT indicators for 1042 journals:

Strong	115
Weaker	365
Opportunity (to publishers)	558
Threat (to authors)	4

3. DEVELOPING AN ECONOMIC MODEL

3.1 BUSINESS CANVAS MODEL

Business canvas for QOAM				
Stakeholders:	Activities: <ul style="list-style-type: none"> • Managing community of collaborating libraries: to produce Base Score Cards • Managing community of contributing researchers: to produce Valuation Score Cards • Maintenance and development of website 	Value proposition(s): <i>QOAM is a free market place for academic authors who are looking for a journal to publish their Open Access article in.</i>	Client relations: The funding consortium (see Revenue streams) defines the requirements for further development of QOAM. Third parties define additional services.	Market segments <ul style="list-style-type: none"> • Researchers • Libraries • Research funders • Research managers; University management • Research policymakers Unique selling points: <ul style="list-style-type: none"> – Hybrid journals included. – Academic crowd sourced quality control. – Extensive price information (incl. OA licenses & memberships).
	Resources: <ul style="list-style-type: none"> • ICT resources • Website management • Manpower for management, marketing and communication & fundraising • Data from researchers, libraries and 3rd parties 		Distribution channels: <ul style="list-style-type: none"> • QOAM website • [possible: file deliveries to 3rd parties; or via API] 	
Cost structure <i>Next steps in the development (2 year)</i> Gaining stakeholder commitment: € 20.000. ICT development 150 hrs: € 15.000 ICT maintenance 30 hrs: € 3.000 Programme & project management: € 40.000. Grand actions (e.g. design overhaul, multi-language version, mirroring): € 20.000 Total € 98.000 per year. <i>During operational phase</i> Communication and PR: € 15.000 ICT development 50 hrs: € 5.000 ICT maintenance 20 hrs + hosting: € 4000 Management/co-ordination: € 15.000 Third party data: € 10.000 Total € 49.000 per year.			Revenue streams: QOAM is a not for profit component of an academic publishing infrastructure. It is managed by a membership association of its investors.	

TABLE 1 BUSINESS CANVAS FOR QOAM PARTIALLY FILLED OUT

In table 1, a partially filled out business canvas for QOAM is presented. The business canvas model¹ is used for developing the economic model for QOAM.

¹ Business model generation; Alexander Osterwalder & Yves Pigneur; 2010; John Wiley & Sons

The business canvas model describes the economic model of an enterprise in nine building blocks:

On the demand side:

- market segments
- value propositions
- distribution channels
- client relationships
- revenue streams

On the supply side:

- key resources
- key activities
- stakeholders
- cost structure

With regard to economic models for Open Access infrastructures and services, the revenue streams generally are not generated by the users. Therefore, the stakeholders are often supporting an Open Access economic model by financial contributions or in-kind contributions. For this reason, the workshop was focused on analysing the stakeholders for QOAM and determining the (possible) value propositions of QOAM for these stakeholders. Finally, the willingness-to-pay of each stakeholder group was assessed.

3.2 STAKEHOLDERS ANALYSIS - VALUE PROPOSITIONS

3.2.1 AUTHORS/RESEARCHERS

The value proposition of QOAM for authors/researchers is:

- Quality review by peers
- Help peers to choose a journal based on quality and price
- Facilitate researchers to comply with funder requirements.

The willingness-to-pay for this stakeholder group is considered very low. Potentially, a donation button might generate a small revenue stream, but not enough to build an economic model on.

3.2.2 JOURNAL PUBLISHERS

The value proposition of QOAM for journal publishers is:

- Increased visibility and credibility of the journal
- The valuation score cards are the equivalent of a client satisfaction survey
- Avoiding the pirate journal label
- Positive scores in QOAM might lead to increased number of submissions
- Attracting OA article submissions for hybrid journals, which help their transition to a complete Open Access business model.

The willingness to pay for this stakeholder group is considered moderate to high. However, it is emphasised that sponsorships of journal publishers should have no influence on the independence of QOAM in general and on the rating of the journals in particular. If a coalition of journal publishers (more than 5) would be willing to sponsor QOAM simultaneously, a negative effect on the perceived independency of QOAM is considered minimal ². The idea came up to create the potential sponsorships by journal publishers equivalent to 1 APC, thus making the proposition attractive and very gettable.

In the longer run, the metrics provided by QOAM could be presented at the journal's websites of a publisher via an API. This might become a payable service from QOAM to journal publishers.

3.2.3 RESEARCH FUNDERS

The value proposition of QOAM for research funders is:

- A service to their researchers that facilitates the realisation of their OA policy and the compliance by the researchers to that policy.
- OA publications of research results funded by research funders might increase the impact of their funding.

² Advertisements for journals or other promotional activities are considered as invalid models for QOAM.

- Market intelligence on the scholarly journal market: in the long run, the QOAM usage statistics will give information about the behaviour of potential authors with regard to price levels of application fees for Open Access articles, thus providing important market information for research funders on this aspect of the scholarly communication

The willingness to pay for this stakeholder group is considered high. However, as most research funding organisations are focussed on project funding, it might be difficult to convince research funders to finance QOAM in a structural way.

3.2.4 POLICY MAKERS

There are a number of organisations that at European and/or global level develop science policies. Examples are the European Commission, European associations and organisations such as Science Europe, EUA, LERU and ALLEA. The value proposition of QOAM - depending on how the policy is formulated - is that QOAM can support the realisation of their policies regarding Open Access. The option that these organisations will take part in financing QOAM is considered as potentially very low. However, moral support for QOAM by these policymakers is seen as possible and potentially very important in order to convince other organisations to fund QOAM.

3.2.5 LIBRARIES, UNIVERSITIES AND RESEARCH PERFORMING ORGANISATIONS

Research libraries, universities and research performing organisations are considered as overlapping stakeholder groups with mostly similar interests. As libraries are mostly subdivisions of a university or a research performing organisation, these groups are lumped together for this purpose with the libraries as the main point of contact for QOAM. The value proposition of QOAM for libraries, universities and research performing organisations is:

- A role in quality assessment which is the hallmark of libraries and as such the option to directly influence the scholarly communication process
- Providing guidance for their authors
- Gives the authors a view at journal title level on:
 - discounts and offsetting deals that the library has negotiated
 - options of funding the publication costs by the OA fund of the library/university.
- A tool to support the evolution towards a more cost-efficient scholarly communication process.

The willingness to pay for this stakeholder group is considered high. However, the following remarks were made with regard to the willingness to pay of libraries:

- There are more and more Open Access infrastructures that look towards libraries for (financial) support such as DOAJ, OpenAIRE, publishing initiatives such as the Open Library for Humanities, data archives (such as EUDAT) and other infrastructural services such as ORCID and ISNI. It is difficult for libraries to assess each service separately on its merits and then start a decision process on the funding requests. There is now an initiative underway to

bundle a number of related OA services and infrastructure elements and seek funding for the bundle³.

- The role of library consortia in this is described as follows: library consortia are essentially bottom-up organisations. In other words, it does not make much sense to approach a library consortium for funding, the initiative has to come from its members.

³ See [Open Access Policy Dependencies](#) – Final Project Report, Knowledge Exchange – 2016

4. FROM DEVELOPMENTAL TO OPERATIONAL PHASE

4.1 POSITIONING QOAM

4.1.1 QOAM MEASURES THE QUALITY OF THE SERVICES OF JOURNALS

As unique and distinguishing features of QOAM the following features have been mentioned:

- Link between quality and price
- Crowdsourced
- Comprises both OA and hybrid journals
- Author- and librarian-based
- Helps authors navigate a changing marketplace

The concept of 'quality' ranks high in the scientific community. Therefore it is important to define more exactly what kind of quality QOAM measures. The discussions in the workshop concluded that QOAM *measures the quality of the services to authors provided by journals*. As such, this quality measurement by QOAM is seen as adequate and relevant.

QOAM does *not* measure the quality of the content of the journal. The quality of the content of the journal is imperfectly measured by the journal impact factor. However, this measurement is not only imperfect, but also applies only to well-established journals that are indexed by citation indexes such as Web of Science or Scopus. The admission policies of those citation indexes are not regarded as transparent. An important advantage of QOAM is that it also measures the quality of the services of recently started Open Access or hybrid journals.

One observes developments in the scholarly communication processes that implicate an increase in preprints: (1) authors will increasingly use preprint services to communicate with their peers, (2) the publication as a journal article will follow later and will mainly serve as a sort of quality mark and for the registration of the publication in the academic record (archiving purposes, citation purposes et cetera). These developments suggest that the services to the author provided by the journal (as measured by QOAM) will become even more important if these development spread among the various disciplines ⁴.

⁴ See also a [blog](#) by Jan Velterop about preprints and the possible significance of QOAM

4.1.2 OTHER INFRASTRUCTURES AND SERVICES

The attendees of the workshop envisage a strategic alignment of Open Access infrastructures and services in the medium and longer term. Such a strategic alignment might increase visibility of these services and provide synergies with regard to the sharing of data and with regard to marketing and communication in relation to the target groups of those services. Such a strategic alignment might also include the 'bundling' of related services with the aim to facilitate funding by libraries or research funders (see also paragraph 3.2.5).

Three QOAM related services have been discussed more extensively during the workshop. The complementarity of DOAJ and QOAM is presented in table 2:

- Both services include Open Access journals, QOAM also includes hybrid journals.
- DOAJ offers a discovery service for Open Access journal articles
- The quality assessment by DOAJ involves a 4 stage independent and objective manual review process by the Editorial team of DOAJ. In addition, DOAJ has started an accreditation procedure that can result in the Seal. The Seal is mirrored in QOAM. The quality assessment by QOAM is based on crowdsourcing among librarians and authors/researchers.
- Both services include the publication fees as listed by the journals, while QOAM also includes the fees resulting from licenses between journal publishers and specific libraries.

	DOAJ	QOAM
Content		
OA journals		
Hybrid journals		
OA articles		
Quality control		
Moderation by editorial staff		
Crowd sourced		
Accreditation		DOAJ mirror
Publication fees		
Web site quotes		
Licensed fees		

TABLE 2 DOAJ AND QOAM COMPARED

Also the Open Access Spectrum (OAS) Evaluation Tool has been discussed. This tool scores quantitatively journals' degrees of openness in six categories such as among others reader rights, reuse rights, author posting rights and machine readability. These evaluations are performed by a team of experts. The overall aim of this tool is to draw attention to the fact that free access does not equal Open Access as there are many more aspects to the latter.

Finally, the Beall's list of predatory journals has been discussed. This is essentially a 'blacklist' approach as opposed to the 'whitelist' approach of DOAJ. It was concluded that an inclusion of this list in QOAM is not opportune (even more so because the red SWOT indicator in QOAM might be seen as equivalent to a predatory status of a journal).

Collaboration with FWF and OpenAIRE

FWF – the Austrian Research Funding Organisation invites all authors that receive funding for Open Access publications to contribute their valuation scorecards to QOAM

A collaboration between QOAM and OpenAIRE is under way and will focus on the EC FP7 Post-Grant Open Access Pilot with the following elements:

- Funded authors by this FP7 Post-Grant OA Pilot will be invited to contribute their valuation scorecards to QOAM
- The collaboration will be disseminated in order to raise awareness among libraries involved in OpenAIRE
- The 154-strong list of fully Open Access journals funded by this Pilot thus far will be checked against the SWOT matrix, particularly aiming to identify journals presently not included in QOAM.

4.2 NEXT STEPS IN THE DEVELOPMENT

4.2.1 OVERALL STRATEGY RECOMMENDED

The overall strategy for QOAM as recommended by the attendees of the workshop is as follows:

1. Get grants for the coming two or three years
2. Build volume for the service in terms of community building of participating researchers/authors and of participating librarians, in numbers of journals scored and in numbers of users of the service. During this period, QOAM should further analyse the needs of the users and the developments in the Open Access landscape.
3. When QOAM has reached a steady state, it could join one of the emerging bundles of OA services or merge itself with another service.

4.2.2 SUGGESTIONS REGARDING BUILDING VOLUME

With regard to building volume, a number of suggestions were made to further build the community of participating authors/researchers and librarians as well as increasing the traffic to the website by users:

- Increase the visibility of the QOAM website by links at library websites and other frequently visited websites by researchers.
- Develop further the community of authors/researchers that will score journals after they published an article in it by inviting authors after writing of an Open Access article (and preferably after usage of the QOAM website) to fill out a journal valuation card. QOAM does this already via periodical mass mailings contacting authors of Open Access articles that are available via DOAJ. Other options include the collaboration with journal publishers and inviting users of the QOAM website that have used the submission button in QOAM to a certain journal. The community consists of nearly 3000 registered users, which has been built up in a period of over two years.
- Develop further the community of collaborating libraries and librarians that are willing to fill out Base Score Cards for journals. Libraries might especially be willing to collaborate if they have concluded licence deals regarding Open Access with journal publishers.

4.2.3 SUGGESTIONS REGARDING FUNCTIONALITY

- Create a mirror site to ensure the robustness of the website
- Create an open API to exchange data with other OA services
- The present authentication system excludes citizen scientists who have no email address using the domain of a university or research organisation. As the role of citizen scientists is seen to increase, an additional authentication solution is desirable.
- Improve the pricing information on the nominal APC's by providing additionally a direct link to the price list at the journal website.

In addition, there was a discussion about to what extent the present criteria were reflecting the wishes and demands of authors regarding the services of a journal in which they publish an article. A number of potential additional criteria were mentioned: (1) the time from submission

to publication and (2) the user-friendliness of the submission process, in particular the flexibility of acceptable formats in this article can be submitted. This discussion led to a recommendation that a survey among authors about what they expect from a journal should be held in the next phase of the development of QOAM.

4.2.4 SUGGESTIONS REGARDING SERVICES

A number of suggestions were made to expand the services of QOAM:

- The metrics provided by QOAM could be presented at the journal's websites of a publisher via an API. This might become a payable service from QOAM to journal publishers.
- Analysis of the usage data will provide market intelligence on the scholarly journal market regarding the behaviour of potential authors with regard to quality and price levels, which might be relevant information for research funders and science policymakers.
- Registries could use the scoring indices from QOAM as a selection criterion for inclusion of journals ⁵.

4.2.5 FINANCIAL CONSIDERATIONS

Considering the important value proposition of QOAM for research funding organisations ('facilitating the realisation of their OA policy and the compliance by the researchers to that policy'), a project funding for 2 years for further development of QOAM is seen as feasible by the attendees of the workshop.

⁵ The Norwegian Centre for Research Data considered this service for their [ERIH PLUS database](#) – the European Reference Index for the Humanities.

4.3 OPERATIONAL PHASE

4.3.1 STEADY-STATE

When QOAM has built volume in score cards that is supported by communities of authors/researchers and libraries/librarians and the website attracts authors/researchers in sufficient numbers to keep the two communities enthusiastic, QOAM has entered the operational phase. This operational phase is expected to start in 2019.

4.3.2 FUNDING BY LIBRARIES AND JOURNAL PUBLISHERS

In paragraph 3.2.2 and 3.2.5 are the value propositions of QOAM stated for OA journal publishers and for libraries. The attendees of the workshop considered the libraries as the most important stakeholder with regard to funding QOAM in its operational phase, as a standalone service or as part of a bundle of related OA services. An important argument for funding such a service was provided by the representative of the Max Planck Institute: this Institute supports for instance DOAJ financially because this is seen as an important service for their researchers.

The OA publishers could be approached for an additional revenue stream by providing sponsorships. This was seen as acceptable if there were at least five or more journal publishers willing to sponsor and if any say over the management of QOAM was excluded.

4.3.3 LEGAL ENTITY

Before entering the operational phase, QOAM should become a legal entity. The legal entity chosen should reflect and ensure as much as possible the [principles for open scholarly infrastructures](#)⁶. The following examples were mentioned in this regard:

A community interest company (CIC) is a type of company in the United Kingdom, designed for social enterprises that want to use their profits and assets for the public good. Important difference with a charity is that the founders can govern and be paid at the same time (which is excluded for charities). A good example is DOAJ, which is managed by Infrastructure Services for Open Access C.I.C.

ORCID is now an independent non-profit organization, ORCID, Inc. and registered as a 501(c)3 organisation, in Delaware, United States of America. The company is managed by a membership organisation with over 400 members and governance rules.

A Foundation under Dutch law ('Stichting') whereby a number of stakeholders form the Governing Board and the two initiators function as directors.

⁶ Bilder G., Neylon C (2015) Principles for Open Scholarly Infrastructures-v1, retrieved 19-6-2016, <http://dx.doi.org/10.6084/m9.figshare.1314859>