

# The Challenge of Creating the Cyprus Academic Library Consortium (CALC): Impacts and Benefits

Marios ZERVAS<sup>a,1</sup> and Maria HARAKI<sup>a</sup>

<sup>a</sup> *Library and Information Services, Cyprus University of Technology*

**Abstract.** This paper describes the development of the Cyprus Academic Libraries Consortium (CALC) and the process of formulating its own agreements with Publishers, but not before explaining how the Public Universities of Cyprus managed to participate in the Hellenic Academic Libraries Link (HEAL-Link) Consortium. Insufficient funds, lack of organization, danger of overlapping information resources, create a slow growth rate and obstacles in the provision of information material by Academic Libraries to their users. Realizing these problems and trying to avoid them CALC was created – comprised of seven members, with its main action limited only to subscriptions to Electronic Resources. Furthermore, criteria are outlined describing reasons for choosing services and electronic resources from Publishers. Also, the dissemination of cost per member institution for each deal is described through a formula created by the library directors and agreed to by the senate of each member institution. Although there are benefits of academic libraries joining the CALC consortium, the fact that there are practical and financial problems as well as challenges is not ignored. Methods, such as an evaluation on the usage of the resources and promotion of the same, must be applied by the librarians of each university consortium member. Qualitative methods are discussed and quantitative methods are presented as essential, to better evaluate the impact of resources in the research area (Cost Benefit Analysis (CBA) and Return on Investment (ROI) formulas). With attention to situations like the overcoming of the Swets (CALC's main supplier) bankruptcy, the paper continues to show that success can be achieved through proper record keeping, hard work and good relations – which is how CALC managed to continue its subscriptions to the Publishers and avoided any interruption of access to the electronic journals. Although setting up a consortium can provide many benefits, CALC is also in the process of acquiring its Legal Entity in order to be better able to process its administrative and cost actions. Further development and future actions are mentioned, including discovering how researchers are using the library's resources to help with their teaching and research.

**Keywords.** consortium, subscriptions, collection development

## 1. Introduction

This paper will describe the development of the Cyprus Academic Libraries Consortium (CALC). Some background regarding the history of the public universities

---

<sup>1</sup> Corresponding author, Arch. Kiprianou 31, 3036, Limassol, Cyprus; Email: marios.zervas@cut.ac.cy.

and their involvement with the HEAL-Link consortium, an initiative that has contributed to the creation and operation of CALC.

The criteria for choosing services and electronic resources from Publishers are outlined which state important reasons for participating in a consortium. Benefits are discussed in order to stress the burdens of library budgets and the limitations that libraries would have if they were to act alone. Problems and challenges are presented through examples and real experiences. Cost Benefit Analysis and Return of Investments are applied in order to demonstrate the benefits of participating CALC members in a deal with a publisher.

Finally the importance of acquiring a Legal Entity is an important measure for the avoidance of managerial constraints and for CALC to be better able to process its administrative and cost actions. Future actions are outlined to emphasize that CALC is not a static organization and will continue to evolve and enrich its activities.

## **2. A Little History**

Before proceeding to describe how CALC was created, it is important to explain how the Public Universities of Cyprus managed to participate in the Hellenic Academic Libraries Link HEAL-Link Consortium [1].

Insufficient funds, lack of organization, danger of overlapping information resources all contribute to a slow growth rate and obstacles in the provision of information material by Academic Libraries to their users.

Realizing these problems and trying to avoid them, collaboration strategies and actions in Cyprus were initiated by the public libraries sector and in particular the University of Cyprus.

The history of the universities in Cyprus is recent. The University of Cyprus (UCY), which is the first higher education institution in Cyprus, was established in 1992. It officially became a member of HEAL-Link in February of 2000.

This initiative paved the way for the Cyprus University of Technology (CUT) and the Open University of Cyprus (OUC) to follow and they also became official members of HEAL-Link in 2009. This was a big achievement considering that CUT and OUC only began to accept their first students in 2007 and 2006 respectively.

In parallel, the three public universities created the Cyprus Academic Libraries Consortium (CALC) with the purpose of subscribing to additional resources and services that could not be covered through the HEAL-Link membership. Also, as members of HEAL-Link, we did not have the opportunity to choose whether or not to participate in a deal. The Publisher deals were for all the HEAL-Link members without exception. The three (3) Public Universities of Cyprus paid a pre-agreed percentage for each deal.

Sadly and due to the world economic crisis, Greece was faced with economic uncertainty and consequently this created many challenges for HEAL-Link and its members. This is why, in 2013, the Cypriot Universities withdrew from HEAL-Link based on a mutual understanding.

As early as 2006, independently of HEAL-Link, the three public universities had already started to collaborate at a local level.

### **3. Creation and Operation of CALC**

Since the three public universities of Cyprus (CUT, UCY & OUC) were no longer members of the HEAL-Link Consortium, something had to be done in order to maintain their electronic resources and to continue to be able to serve their respective academic communities. Despite the economic difficulties Cyprus was facing due to the restrictions and implementation measures imposed by Troika, CALC expanded in 2013 to include private universities, and the process of formulating its own agreements with existing and new Publishers was completed successfully. In addition, all payments were made through the supplier Swets Information Services BV.

When we began collaborating directly with Publishers we used:

- a) The percentage participation rate that we had with HEAL-Link as the starting point for our negotiations and,
- b) The 2012–2013 Cypriot financial crisis as an argument due to the extremity of the financial situation at the time (Haircut). “On 25 March 2013, a €10 billion international bailout by the Eurogroup, European Commission (EC), European Central Bank (ECB) and International Monetary Fund (IMF) was announced, in return for Cyprus agreeing to close the country's second-largest bank, the Cyprus Popular Bank (also known as Laiki Bank), imposing a one-time bank deposit levy on all uninsured deposits there, and possibly around 48% of uninsured deposits in the Bank of Cyprus (the island's largest commercial bank), many held by wealthy citizens of other countries (many of them from Russia) who were using Cyprus as a tax haven. No insured deposit of €100,000 or less would be affected” [2].

The CALC consortium is comprised of seven members, of which four belong to the private sector. Its main action, so far, is limited only to subscriptions to Electronic Resources (electronic journals, databases, ebooks).

Increasingly, electronic resources have become the mainstream format for academic libraries [3].

CALC moved to direct contracts, negotiations and final agreements with more than 20 recognized Publishers and Suppliers of scientific journals and electronic resources and continued to collaborate with Swets.

### **4. Criteria for Choosing Services and Electronic Resources from Publishers**

The main criteria for choosing these services were:

- The ability to provide on-line access to electronic content
- Providing abstracts and full-text files of scientific journals in subject areas related to the research and educational needs and directions of CALC members
- Obtaining depth of coverage and perpetual access
- Obtaining appropriate equipment and software for the development of the ILL service

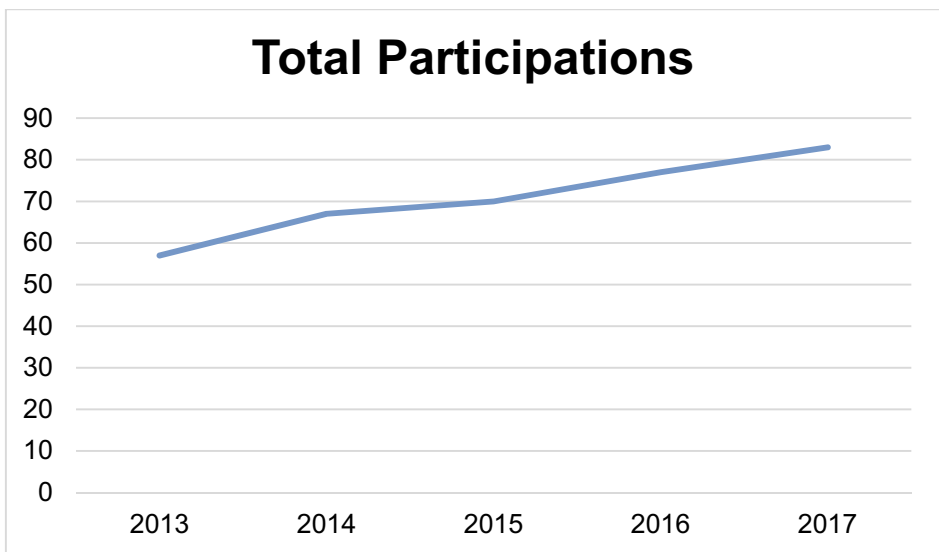
Additional criteria for the selection of electronic resources (journal packages and databases) were:

- The common interest of the CALC member institutions in subject categories, as recorded in their research programs and related activities
- The large number of published journals and subscriptions in these subject categories
- The great cost of these journal subscriptions
- The importance of early notification for the academic community on the latest developments in these sciences

Each library sets priorities and determines collection needs in relation to its budget which is allocated by the university board. The CUT is unofficially the coordinator in regards to correspondence and negotiations with the Publishers. The dissemination of cost per member institution for each deal is based on a formula created by the library directors and agreed to by the senate of each member institution. The formula takes into consideration the FTEs (no. of Undergraduate Students, no. of Post Graduate Students and number of Academic & research Staff) of the members who participate in a specific deal.

## 5. Benefits

In the framework of benefits, this paper presents some examples of cases where certain existing consortium members, participating in a deal, have benefited from additional members joining.

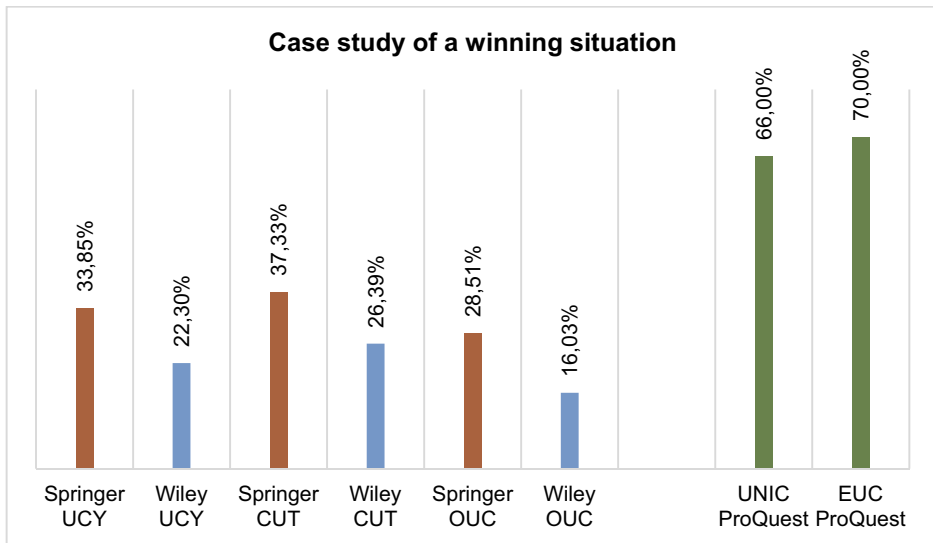


**Figure 1.** Total participations per year, 2013 -2016

According to Figure 1, it can be concluded that when a new member to an existing deal is added, it automatically implies more savings. Therefore, it is not obligatory to

participate in any consortium deals and contribution is based on a library's ability to participate depending on budget availability and priorities.

Figure 2 presents an example of the benefits of participating in a consortium and a winning situation.



**Figure 2.** Case study of a winning situation

The combination of these offers from the Publishers, according to the above Chart, allowed CALC to have full participation, increased content and cost savings.

For example, in the case of Springer and Wiley, in 2013 the only participants were the three public universities. While researching the interest of the rest of the CALC members to participate in the renewal year 2014, only one private university expressed interest in Springer, namely FU.

Regarding the interest for Wiley, only UNIC was interested, because it already subscribed to Wiley independently and was paying a higher amount in comparison to the public universities.

Regarding ProQuest Central only two private universities had a subscription (UNIC & EUC). The public universities were not so interested because they already subscribed to EBSCO Academic and Business Complete which covered their needs.

Taking into consideration the above, the Publishers recognized that there was no interest on the part of the private universities to participate in the Springer and Wiley deals and so they decided to make an attractive offer to include all the CALC members.

As a result, Springer's offer included all the members with a 19% increase in the original price.

Wiley's offer included all the members with a 6.3% increase in the original price.

ProQuest's offer included all the members with an 11.4% increase in the original price.

The combination of these offers from the Publishers allowed CALC to have full participation and increased content.

Speaking on behalf of CUT, these deals benefited our University by saving approximately €20,000 yearly.

In 2013, CALC signed for the first time with Springer and Willey a multiyear “Big Deal” [4], where all the CALC members participated and benefited with access to a large portion of the publisher journals. In support, Kenneth Frazier noted “the Big Deal appears to be an especially good deal for smaller academic libraries that join with a consortium in purchasing a major comprehensive journal license” [4]. The creation of our consortium has benefited the participant libraries with more content and better pricing.

Since its creation, the CALC has benefited very much from the negotiation process with the Publishers. Everything to do with correspondence, negotiations, license agreements, invoicing, payments, access etc. has helped us acquire experience and knowledge which has proven to be invaluable towards our actions and future plans.

Such actions include, coordination and administration of CALC, invaluable learning experience, connections and development of good relations with Publishers/Suppliers and development of communication and cooperation among the CALC members.

## **6. Problems and Challenges**

Although there are benefits for academic libraries joining the CALC consortium, we cannot ignore the fact that during its course there were also problems and challenges.

Swets Information Services BV was the Supplier who dealt with the invoicing and payments between the HEAL-Link Consortium and the Publishers. Once CALC was formed, it made sense for us to continue our cooperation with Swets and thus we had agreed for the invoicing to be done through Swets. The year 2013 was processed smoothly and all the payments to the Publishers were completed successfully. For the year 2014, unfortunately, CALC was faced with a very big problem due to the sudden news of the Swets bankruptcy!

Some payments were completed but some were not. In the case of four (4) publishers the money never reached them. As you can imagine, this problem created a lot correspondence between CALC and the Publishers. Proofs of payment had to be sent to the Publishers in order to show that, on CALC’s part, payments were indeed made. CALC also took the initiative and sought the representation of a lawyer in Holland.

On the other side the trustee in Bankruptcy on behalf of Swets in Holland, was sending statements claiming payments from some of the CALC members.

After dealing with the trustee in Bankruptcy and proving them otherwise about their wrongful claims, we still had to deal with the Publishers who never received their payment. Success in proving the Trustee in Bankruptcy wrong with regards to their claims came through proper record keeping and good filing systems.

Additionally, through hard work and good relations, CALC managed to continue its subscriptions to the Publishers and avoided any interruption of access to the electronic journals.

One example of good relations and mutual understanding was a case of a Publisher who was owed hundreds of thousands by CALC due to the Swets bankruptcy. The

Publisher ended up providing a waiver of claims towards CALC and in turn CALC had subscribed to additional material.

The Swets Bankruptcy may have caused problems for CALC, but it did not damage the negotiations section due to the fact that CALC, from the beginning, dealt with the Publishers directly.

Since then and until the present, CALC does not use a supplier for its deals with Publishers. The Swets bankruptcy has made our collaboration with Publishers more flexible. Publishers accept to invoice the CALC members separately. They also accept payment in installments and consequently CALC saves a lot on the commission that was paid to a supplier.

Another problem/challenge is the fact that some universities have had to cancel subscriptions due to the lack of sufficient funds. The increase of commonly subscribed resources raises the risk of the remaining members to be burdened economically should a member withdraws from a contract. "The collecting goals have to be balanced with collection evaluation or assessment activities at the local level" [5].

In order to overcome the above, an evaluation on the usage of the resources and promotion methods must be applied by the librarians of each university consortium member.

In the case of CUT, the evaluation of activities is performed at a local level by our library and our Tender Committee is then made aware of the cost per search and per download for each package of electronic resources. Our library follows the same method as explained by [6] and the collection policy document prepared is based on two primary goals: a) the curriculum and b) research support. The CUT Library's target in the long term is for the subject librarians to have an in-depth knowledge of their specific areas of the library collection and to help in collection development [5].

Many of our members must also set similar targets as it has become apparent, that they too need to make better use of the necessary personnel and apply their knowledge and expertise in order to evaluate their collections and know the usage of resources. This will help them to support their decisions and their according Committee to approve, with more certainty, the renewal of subscriptions.

## **7. Cost Benefit Analysis and Return of Investments**

To quantify the above analyses, the CUT has adapted a combination of Cost Benefit Analysis (CBA) and Return on Investment (ROI) formulas and analyzed consortium deals with Publishers. That's why cost-benefit and return of investment analyses need to be done at the consortium level. As Judy Luther said, "a review of existing research identified several cost/benefit analyses based on user surveys and faculty productivity studies correlating citations and grants. However, there were no models for calculating a return on investment (ROI) in academic libraries" [7].

In our study, we are using the model by Betsy Kelly in order to calculate the CBA and ROI [8].

The formula for ROI is (a) "the total value of expense for the consortium to produce benefits" minus (b) "the total value of expense for the specific library to produce benefits" divided by (b) "the total value of expense for the specific library to produce benefits" and multiplied by one hundred.

The formula for CBA is (a) “the total value of expense for the consortium to produce benefits” divided by (b) “the total value of expense for the specific library to produce benefits”.

$$\text{ROI}\% = ((a - b)/b) * 100 \quad \text{ROI is represented as a percentage} \quad (1)$$

$$\text{CBA} = a/b \text{ is represented as a ratio CBA: } 1 \quad (2)$$

When the ROI is more than 1% or the CBA more than 1:1, they are considered positive thus indicating that the value of benefits surpasses the cost to provide access to the content.

**Table 1.** CBA and ROI

Library	Nb of Resources	Consortium Price	Library share	CBA	ROI
UCY	19	1933828	620486	3,11	212
CUT	18	1922087	305679	6,28	529
Neapolis	11	833461	47086	17,70	1670

By observing Table 1, it can be deduced that small libraries benefit more than larger libraries.

This conclusion is derived using the FTEs of each university consortium member and our formula, in order to calculate a library’s participation in each deal.

For example, for every Euro spent, CUT receives €6,28, UCY €3,11 and Neapolis €17,70.

A cost per use analysis is done every year and the data is presented to our Tenders Committee in order to justify the need for renewals.

A combination of quantitative and qualitative analyses is essential to better evaluate the impact of resources in the research area. Tenopir wrote, “ROI is only one method for measuring the value of a library’s collection and services. The benefit of multiple methods is that numbers in and of themselves rarely tell the full story” [9].

Further development and actions will include measuring the impact of the subscribed journals in relation with the articles cited by our researchers output. In the future, surveys and interviews will be conducted in order to discover how researchers are using the library’s resources to help with their teaching and research.

## 8. Legal Entity

Although setting up a consortium can provide many benefits, it demands a big commitment from all the members. In order to be better able to process its administrative and cost actions, CALC has already completed the drafting of the legal document in order to acquire its Legal Entity. This action aims to help the CALC to operate as an official nonprofit company.



The Legal Entity outlines the main terms and objectives thus making official all the actions of CALC in relation to the deals made between the members and the Publishers/Suppliers.

Without a Legal Entity, important managerial constraints are created such as: no autonomy, no dedicated budget, no management of budget and staff, etc.

## **9. Future Actions**

CALC can go beyond the academic sector and can contribute to the public sector also, e.g. small government research institutions.

It is our belief that the below points relating to future actions can help in the evolution of libraries:

- The creation and function of a union catalog of bibliographic records and the development of common cataloguing policies can contribute to the continuous education of library staff and the sharing of expertise.
- The joint implementation of technical infrastructure, e.g. creation of electronic repositories, thematic portals, digitization and archive management etc.
- The systematic monitoring and adoption of international practices and standards in matters relating to the operation of libraries e.g. such as quality issues, copyright issues, and the adoption and use of creative commons licenses or other similar licenses.
- Providing seminars for library users to maximize the use of information resources.
- Provision of consulting services on library related issues.

## **10. Conclusions**

It is our belief that Consortia has helped and contribute towards the development of libraries.

In the case of CALC, the collaboration among its members, has helped by establishing a common policy on electronic journal subscriptions, with the aim of promoting rational growth of journal collections among partners, and savings and access to a greater number of electronic sources in order to meet the educational and research needs of the users of the participating institutions. Proof of this is shown through the Cost Benefit Analysis (CBA) and Return on Investment (ROI) demonstrated above and especially for small Universities.

Also, CALC's experience maintaining good relations and strong collaborations with Publishers also helped with the overcoming of various problems and obstacles.

It is our belief that CALC can go beyond the academic sector and can contribute to the public sector also, e.g. small government research institutions.

A challenge that is of great concern to CALC, is when universities have to withdraw their participation from subscriptions due to the lack of sufficient funds. Evaluation of the usage of the electronic resources can help to prevent this from happening and minimize the risk.

## References

- [1] HEAL-Link consortium Retrieved April 10 2017, Available at <http://www.HEAL-Link.gr/?lang=en>
- [2] 2012-2013 Cypriot financial crisis retrieved April 11, 2017, Available at [https://en.wikipedia.org/wiki/2012%E2%80%9313\\_Cypriot\\_financial\\_crisis](https://en.wikipedia.org/wiki/2012%E2%80%9313_Cypriot_financial_crisis)
- [3] Pan, D. & Fong, Y., 2010. Return on Investment for Collaborative Collection Development : A Cost-Benefit Evaluation of Consortia Purchasing. *Collaborative Librarianship*, 2(4), pp.183–192. Available at: <http://digitalcommons.du.edu/cgi/viewcontent.cgi?article=1232&context=collaborativelibrarianship>.
- [4] Frazier, K., 2005. What's the Big Deal? *The Serials Librarian*, 48(1–2), pp.49–59. Available at: [http://www.tandfonline.com/doi/abs/10.1300/J123v48n01\\_06](http://www.tandfonline.com/doi/abs/10.1300/J123v48n01_06).
- [5] Kinner, L. & Crosetto, A., 2009. Balancing Act for the Future: How the Academic Library Engages in Collection Development at the Local and Consortial Levels. , 49(4 OP-Journal of Library Administration. Jun2009, Vol. 49 Issue 4, p419-437. 19p. 5 Charts.), p.419. Available at: <http://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=ehh&AN=39254211>.
- [6] Evans, G.E., 2002. Management issues of co-operative ventures and consortia in the USA. Part one. *Library Management*, 23(4/5), pp.213–226. Available at: <http://dx.doi.org/10.1108/01435120210429943> [Accessed January 3, 2017].
- [7] Luther, J., 2008. University investment in the library: What's the return? A case study at the University of Illinois at Urbana–Champaign. *Library Connect white paper*, (1), p.18.
- [8] Kelly, B., Hamasu, C. & Jones, B., 2012. Applying Return on Investment (ROI) in Libraries. *Journal of Library Administration*, 52(8), pp.656–671.
- [9] Tenopir, C., 2010. Measuring the Value of the Academic Library: Return on Investment and Other Value Measures. *The Serials Librarian*, 58(1–4), pp.39–48.