

The Finances and Cost Structure of PCI

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The Finances and Cost Structure of PCI

Summary: Peer Community In (PCI) is dedicated to the non-profit ethos, viewing knowledge as a common good. We provide free access to knowledge by minimizing costs in production and distribution, embracing cost-effective practices like economical travel and virtual meetings. Our funding primarily comes from public sources, emphasizing democratic decision-making in resource allocation. We prioritize sustained funding from diverse institutions over one-time grants. In-kind contributions from academic and research entities, along with voluntary assistance from colleagues, play a crucial role. We manage our finances prudently, accumulating savings as a safeguard for potential lean periods. Our cost-effective model supports scalability and cost reduction per article. This approach aligns with our mission of accessible publishing while ensuring financial sustainability.

FUNDAMENTAL PRINCIPLES OF COSTS

Non-Profit Ethos at PCI: PCI is founded on the principle that knowledge transcends the typical characteristics of a marketable product. Recognizing its immense value to humanity, we view knowledge as a common good, indispensable to the progress of human societies. In line with this philosophy, PCI is dedicated to ensuring the widest possible access to this knowledge. This commitment involves providing free access to both authors and readers, an initiative made possible by minimizing production and distribution costs. To adhere to our non-profit status, PCI focuses solely on covering the essential, real costs required for the production and distribution of knowledge. We abstain from generating profit from these activities. Moreover, PCI does not provide financial rewards for risk-taking, does not borrow money or pay intermediaries.

Embracing a Modest Lifestyle at PCI: Adopting an 'academic' lifestyle, akin to the cost-efficiency in public research labs, especially prevalent in France, we operate on minimal budgets. This involves avoiding unnecessary expenses, using limited resources wisely, and actively cutting costs. Our practices include choosing economical transport, budget-friendly accommodations, calling for voluntary researchers' input rather than outsourcing tasks (eg for article formatting), opting for street food over restaurants, and sharing accommodation during travels. Opting for virtual meetings when possible helps us minimize travel expenses.

PCI's Investment Strategy: Significant investment, especially in web development, constitutes a major portion of our initial outlays. Opting against proprietary and ready-made solutions, we focused on our unique workflow and cost-effectiveness. Our workflow, including preprint evaluation, editorial decisions, and potential recommendations, demands specific tools. This particularly applies to PCI Registered Reports, necessitating a tailored tool for their two-stage peer-review and "in principle acceptance" process. This development not only places us ahead of standard solutions but also aligns with our budget-friendly philosophy. Our expanding range of thematic PCIs, currently at 17 and aiming for over 100, underscores the impracticality of per-unit commercial tools. This led to our own

comprehensive tool for evaluating preprints and registered reports, encompassing an intensive initial development phase now nearing completion, followed by a maintenance-focused phase.

Economic cost objective: One of the founding ideas of PCI is to help research institutions save money in the area of scientific publications, in order to increase the proportion of funds devoted to research itself. It's not the only idea, but it's a very important one. In its current state the publishing ecosystem in science, technology and medicine (STM) is very expensive. The annual turnover of publishers in the field of article publication (excluding books) is around \$10 billion, for approximately 3 million articles published per year (see the STM 2022 supplement report, https://www.stm-assoc.org/2022_08_24_STM_White_Report_a4_v15.pdf). The number of articles published is increasing every year, and publishers' turnover varies slightly from year to year, but these figures are more or less accurate in a given year. The average cost of publishing an article in STM for society as a whole is therefore around €3,000, which is a considerable sum. For PCI, this figure represents an appalling amount that should never be exceeded: it is the threshold that PCI uses as a reference when working to reduce costs to a fraction of that amount.

FUNDAMENTAL GUIDELINES FOR RESOURCE ALLOCATION

Predominantly Public Financing: Acknowledging that knowledge is a shared asset, it is imperative that the majority of funding ensuring its creation and dissemination originates from collective, thus public, sources. The oversight of this resource ought to be as democratic as feasible, entrusting decision-making to either the users themselves or their elected representatives. While the scientific community is at the forefront of this initiative, it is essential to include a broad spectrum of actors — encompassing educators, specialists, journalists, medical professionals, engineers, technicians, intellectuals from various fields, and the general public — in the participatory process. Consequently, this approach necessitates primarily relying on resources from the public sector.

Potential for Private Contributions: Modest private donations can be accepted without conditions or formal agreements. However, larger private contributions should be accompanied by a formal agreement. In this agreement, the donor is required to commit to refraining from influencing the operations of PCI, as well as the content of evaluations and recommendations issued by the PCIs and the Peer Community Journal.

Emphasis on Sustained Funding: In financing the operations of PCI, our focus is on securing consistent, modest funding from a diverse array of institutions and universities. This approach is favored over seeking large, one-time contributions from a limited number of supporters. The nature of PCI's operations is ongoing, requiring regular and stable financial support.

Limitations of Infrequent Funding from Calls: Funding acquired through responses to calls for projects, while beneficial, is inherently one-time and thus not ideal for sustaining ongoing operations. We aim to avoid becoming reliant on such exceptional funding, as it creates a lifestyle standard that may not be consistently achievable. This is a known challenge for many open science initiatives, which often struggle to secure adequate, regular funding after initially depending on one-off grants.

In contrast, recurrent funding offers stability, predictability, and the ability to plan operations effectively. While exceptional funding, such as that from calls for projects, is valuable for specific short-term projects or developments, it should not be the primary source for financing day-to-day operations. Instead, it is more suited for distinct, one-time activities like investments or specific communication campaigns.

In-Kind Contributions from Academic and Research Entities: Academic and research institutions, including universities, departments, institutes, and laboratories, play a pivotal role in knowledge dissemination. They already make significant contributions to scientific publishing, as many editors, editorial managers, and reviewers serving commercial journals are affiliated with these institutions. At PCI, we adopt a similar model: we do not offer financial compensation to managing board members, recommenders or reviewers but rather utilize the expertise of colleagues within the context of their academic and research roles, supported by their respective institutions and universities. This approach aligns with our philosophy that it is both logical and preferable for these professionals to contribute to the dissemination of open, free-access science. INRAE, the French National Research Institute for Agriculture, Food, and Environment, stands as the primary contributor in terms of members actively involved in PCI. The CNRS (National Centre for Scientific Research), France's foremost multidisciplinary research organization, is the next major contributor. Currently, two INRAE researchers, an INRAE engineer, and a CNRS web developer are dedicating part of their time to operating the overall PCI initiative.

Voluntary Contributions from Colleagues: The concept of providing a free service to users (such as readers and authors) naturally lends itself to benefiting from the voluntary efforts of these very users. We are always open to and appreciative of individuals willing to offer their assistance in various capacities. This is the very basis of the PCI organisation: teams of volunteer researchers are responsible for setting up, running and coordinating the various PCIs. We also include scientific colleagues who contribute to the formatting and compliance of manuscripts, as well as those who volunteer for proofreading tasks. Additionally, other colleagues have generously contributed their skills in creating PCI logos, representing PCI at conferences, and managing aspects of manuscript processing during the early stages of our operations. These contributions are invaluable in supporting the mission and activities of PCI.

FUNDAMENTAL GUIDELINES FOR FINANCIAL MANAGEMENT

Navigating Financial Uncertainty in Open Science: Open science is highly dependent on changing political priorities and is therefore subject to fluctuating resources. While national policies in France and Europe are presently supportive of open science, the landscape of scientific funding is dynamic and can shift unexpectedly, sometimes moving away from currently prioritized objectives. This unpredictability necessitates a cautious approach. At PCI, we operate under the assumption that we may face challenging times ahead for open science. Consequently, we have adopted a savings-oriented strategy. The reserve is intended as a safeguard, a financial cushion for more difficult times. With this prudent budget approach, PCI is in a strong position to sustain operations for over a decade, even in

the event of a sudden and complete cessation of funding, though such an extreme scenario is, hopefully, improbable.

Prudent Financial Management with PCI Savings: At PCI, our savings strategy is carefully crafted to avoid high-risk financial ventures. Our primary goal is not to generate income through our savings but to safeguard the organization's financial resources. To mitigate the impact of inflation without taking significant risks, we have chosen to invest in a "Livret A" savings account. This account type is a regulated, capped, risk-free, and tax-free savings option available in France, offering a secure place for our funds. The "Livret A" account has been maximized to its allowable limit, ensuring our investments remain within a safe, no-risk framework. This decision was made with the full consent of PCI members, adhering to a transparent and democratic process. For associations governed by the French "Law of 1901," like PCI, the "Livret A" account is an ideal financial tool, designed to facilitate effective financial management. The interest rate for the Livret A account, though one of the lowest in France (3% in 2024), offers some return while maintaining security. This type of account is virtually zero-risk, with its funds guaranteed by the French government. The accumulated funds in "Livret A" accounts are managed by the "Caisse des dépôts et consignations," a French public banking institution. These funds are typically allocated towards financing social housing and urban renewal projects, aligning with our values of contributing to societal well-being.

Creating a Virtuous Economic Cycle: PCI's operational model is designed to generate a positive feedback loop, where increased activity leads to greater cost-efficiency in worldwide publication, resulting in significant savings for research institutions. This, in turn, can boost the funding PCI receives from public institutions, allowing us to further expand our activities, and so on. This virtuous cycle hinges on our economic model's ability to effectively reduce overall publishing costs. As research funders spend less on traditional publishing avenues, particularly those involving high-cost commercial publishers, they can redirect their budgets toward other research activities. A portion of these savings could be allocated to support PCI and similar entities in the low-profit, non-profit, or non-commercial publishing sector. Our analysis suggests that, at equilibrium, the cost of an article recommended by PCI could be about one-tenth of the average cost of a standard article in the fields of science, technology, and medicine. Such a model not only ensures substantial savings but also opens up opportunities for research funders to support diamond open access — the form of open access publishing where neither readers nor authors pay fees. The expected savings from this model are substantial, offering research funders considerable flexibility in their support for open access initiatives like PCI. This approach aligns with our mission to make scientific knowledge more accessible while maintaining economic sustainability.

Reducing Article Costs through Scalable Operations: PCI's current total costs are in line with those of a non-profit publisher, with a significant portion comprising human resource expenses, primarily as in-kind contributions from INRAE (notably part of the salaries of two researchers and an engineer). These expenses are classified as fixed costs, encompassing the organization of PCI, development and testing of web solutions, communication, and other operational activities. Importantly, these costs are constant and do not vary with the level of PCI's activities or the number of articles processed for evaluation. As the volume of PCI's activities and article submissions increases, the proportion of fixed costs in relation to total costs is expected to decrease substantially. This is a key aspect of our economic model: the scalability of operations allows for a reduction in the relative burden of fixed

costs. Additionally, variable costs, which are directly linked to the volume of submissions and evaluations, are only slightly increasing. This is due to the progressive automation of several resource-intensive processes such as formatting, editing, verification of open science policies, and compliance checking. The automation not only streamlines operations but also reduces the cost per activity. As a result of these dynamics, we anticipate a notable overall reduction in costs, leading to a significant decrease in the cost per article. This efficiency gain not only supports PCI's mission of accessible publishing but also enhances our financial sustainability, ensuring we can continue to provide valuable services to the academic community.

Commitment to Transparent Financial Practices at PCI: Given that the majority of PCI's funding is derived from public sources, including in-kind contributions from public institutions and voluntary work, we place a high priority on financial transparency. To uphold this standard, we annually publish a detailed list of our donors and their contributions. Additionally, starting this year, we have begun releasing our annual financial report and the report from our chartered accountant, providing further insight into our financial management. Our commitment to irreproachable financial conduct is not only a matter of principle but also a legal requirement. French law mandates that associations receiving a certain threshold of public grants must engage a chartered accountant for preparing their accounts and an auditor for their review and certification. This process serves dual purposes: it allows the state to verify the proper management of subsidies and assures our donors of our diligent financial stewardship. Since 2022, PCI has been subject to these requirements. In our first year under this regime, we engaged both a chartered accountant and an auditor. The accounts for 2022 were duly prepared and certified. During the general assembly of the association, held on December 4, 2023, we presented a positive report to our members, along with expressions of satisfaction from the auditor. This represents a significant milestone for PCI, reinforcing our commitment to responsible and transparent financial management, which is essential for maintaining the trust and support of our community and stakeholders.

For more information about 2023 PCI's finances and article costs see this blog post.