Why Must Journals at the University Level be Well Managed to Support the Era of University Independence?

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Abstract. Scientific journals have a vital role, from developing and disseminating science and technology to becoming a source of income generating for universities. Semarang State University has 166 journals, both National and Scientific Journals, spread across all faculties, study programs, institutions, and postgraduate programs. Many journals demand a good governance system characterized by a comprehensive service system. These procedures ensure consistent implementation and clear division of roles, so that journal management is carried out consistently, accountable, transparently, and professionally. This study aims to compile the main indicators of core services that must exist in journal management units at universities to support improving the performance of university journals that are consistent, accountable, transparent, professional, and able to capture future business opportunities. This type of research uses Participatory Action Research. The sampling technique is purposive sampling, and qualitative data is analyzed using content analysis. The study results found that the management of professional journals that have an orientation to business development at the university level requires a minimum of 10 key roles with 12 minimum service systems that must be developed. From these results, the next step is to develop an adequate information system outside of OJS to improve the performance of managers and services.

1 Introduction

The massive development of journals in academic institutions nowadays encourages publishers to improve their journals' performance. The titles as a reputable journal, accredited journal, high-impacted factor journal, international

indexed journal, or high-ranked journal are some qualifications pursued by the journal managers and publisher institutions. Docampo & Safón [1] agree that journal rating is a crucial factor to be chosen by authors when submitting their work. In today's advanced world, reputation must be recognized and compete with others [2]. The international reputation and accredited journals help universities and institutions boost their status. Peters et al. [3] examined in their research that authors are more favorable to submit their articles in high-quality journals than in low-quality journals; even though the process will be complicated, it is all about reputation for all involved parties.

In Indonesia, especially in academics, journals are essential both for the development and dissemination of science and technology, dissemination of research and service results, and promotion for teachers and lecturers so that they have the potential to become business opportunities at universities in increasing income generating. Universitas Negeri Semarang (UNNES) is one of the major universities in Indonesia, which has a large number of journals, 166 journals, both National Journals UNNES (NJU) and Scientific Journals UNNES (SJU). These journals spread across all faculties, study programs, institutions/units to postgraduate programs. Many journals have implications for the number of personnel involved in its management so that it can be developed professionally. In 2022, UNNES journals' achievement is that 124 out of 166 journals (75%) have been nationally Indonesia accredited (SINTA/Science and Technology Index), while the remaining 42 journals (25%) have not been accredited nationally by SINTA. From 124 journals that have been accredited by Sinta, the ranking distribution is SINTA 1 (3%), SINTA 2 (16%), SINTA 3 (27%), SINTA 4 (31%), SINTA 5 (16%) and SINTA 6 (7%). SINTA is a portal that contains the measurement of the performance of science and technology, which includes, among others, the performance of researchers, writers, and authors to the performance of journals.

The large number of journals at UNNES has implications for the need for human resources to manage these journals, including related stakeholders. Therefore, it demands a good governance system, especially the provision of service systems, procedures, and appropriate division of roles to ensure that journal management is conducted in an orderly, consistent, accountable, transparent and professional manner. Before 2022, journals at UNNES were managed by each study program/unit/institution/postgraduate program. However, in early 2022, UNNES had the policy to integrate all journal management at the unit level to be centralized at the university level. This policy aims to facilitate control related to article quality and management, monitor the performance of both the manager's performance, articles, service quality to financial aspects, and make it easier to provide support for continuous and continuous performance improvement. Another objective of this integration is to ease the administrative burden, especially financial administration, which has had to be handled by journal managers, most of whom are lecturers who have an enormous burden on the three pillars of higher education (teaching, researching, serving). Journal managers are expected to focus only on substantive aspects to improve the quality of articles and article management to improve their journals to become international journals with reputation and impact factors.

The Indonesian Government regulations regarding journal management in Indonesia are stated in Perdirjen No. 49/DIKTII/2011 entitled Guidelines for

Accreditation of Scientific Periodic Publishing and Policy Letter for Uploading Scientific Work and Journals Number 2050/E/T011.The guidelines state, "The Director General of Higher Education will not evaluate scientific papers published in a journal if the articles and the identity of the journal in question cannot be tracked online." These regulations encourage UNNES to issue the centralized management of journals. Therefore, it is crucial to manage and publish scientific journals online, assisted by a software system to support the management and publication of journals, namely Open Journal Systems (OJS). OJS is an open-source software developed by the Public Knowledge Project in 2001 and is used to manage scientific journals online. OJS 3 is the last development released in 2016. In the process of installing OJS applications, what is needed is a web browser, web hosting account, and OJS installation files [4]. Journals at UNNES are 100% supported by the OJS system that manages articles submitted to journals at UNNES.

Besides OJS, the scientific publication management team should always consider other aspects. Such as the importance of knowledge, exploration, experience, time management, good knowledge in managing projects, and always being ready to solve problems when the project progresses [5]. For example, if there is damage to OJS, which can result in data in the OJS system being lost/damaged, even receiving complaints from the author [6]. Therefore, maintenance and monitoring in an online journal service must still be carried out to avoid these things by using games such as Google Education Products connected to campus services and other efforts [7].

The rapid development of technology makes everything computerized using a system that is connected to the device. This condition also happens with document management systems in technology adoption [8]. Some factors that hinder the adoption of information systems are high expectations that technology could always ease the work, high expectations that technology could improve work performance, facilities for training, communication among members, and social relation that influence attitudes and habits [9]. In journal governance, one of the information systems developed to assist article management is to use OJS. OJS has a significant role; OJS is designed to address journal application problems, including journal regulations, author review and editing, issue management, and journal archiving and indexation. OJS can be downloaded from the public and installed on various operating systems that are running and can then be activated. Most journal management systems provide centralized hosting on their services and add a fee for the operation of a journal. Once installed on a local server, it can then be used to drive various journals on the site and are ready to be configured by the journal manager or editor. Authors can submit work directly to the website, and editors can share their various choices [10].

On the other hand, many factors influence people's perceptions of journal quality. Researchers and authors are only concerned with journal ranking, indexation, and reputation of a journal before submitting their work [11]. However, to achieve those titles of a high-quality journal, journal managers need many aspects, including the organizational and financial performance of journal management. In addition, journal management is better with an online system because it could reach worldwide, and not only that because e-publishing will cut many traditional roles, which will be more efficient and trusted [12,13]. Based on the research above, we can conclude that to achieve journal ranking and rating nationally and internationally; journal managers

need to have good governance of the journal system. The financial and administrative system in journal management is crucial, unlike others. Therefore, this paper proposes an innovative way to realize a better management system for scientific journals, mainly on journal service systems and role sharing in organizations. A good journal service system and division of roles will positively impact improving the quality of journal services. In the long term, this will improve the reputation of journals and universities and create a business opportunity to generate income-generating universities to support the era of university independence.

2 Method

2.1 Research Design

This study uses a Participatory Action Research (RAP) research design. RAP is research activities carried out in a participatory manner among residents or members of a community to encourage transformative actions (changes in conditions for the better). PAR researchers do not separate themselves from the situation under study but instead immerse themselves in it and work with the community to conduct Bible studies. PAR does not stop at the publication of research results or reports and recommendations for further research but is oriented towards changing the situation, increasing the knowledge and ability of the community to understand and change their situation for the better.

2.2 Data Analysis

The data collection in this research is using Focus Group Discussion (FGD). FGDs were carried out starting from the needs identification process, design validation, testing the development of governance documents, to the assessment process. The FGDs carried out involved many stakeholders, including the UNNES Journal and Publication Center team, the UNNES journal management representatives, the university planning department, the university finance department, the university tariff team, and university-level internal auditors and the university remuneration team. The FGD was carried out, taking into account the current Covid-19 condition. The resulting qualitative data analysis was analyzed using the content analysis method.

2.3 Participants

The sampling technique in this study used purposive sampling. The informants chosen are the journal manager at the study program/unit/institution/postgraduate program level and the person who has the authority to determine the direction of the journal service system policy at the university. They are the team of the journal development center and university level publications, the leadership journal management unit at the study program/unit/institution/postgraduate program level, university planning department, university finance department, university tariff team, university-level internal auditors, and university remuneration team. They are involved in the needs identification process, design validation, and governance development trials to the assessment process.

3 Results

From the identification of role needs, it is found that for professional journal management from both academic and business aspects, a minimum of 10 types of journal manager roles are required, namely: editor in chief, section editor, guest editor, reviewer, layouter, proofreader, translator, and Turnitin checker staff. Meanwhile, finance staff and IT staff are positioned at the university level. From the results of the FGD at the university level, it was agreed that the main prerequisite for journal management human resources is the suitability of the management science field with the journal's scope. In addition to increasing focus and professionalism, the university must further regulate concurrent positions of journal managers. The division of roles for each journal manager is presented in table 1. Journal managers assigned to universities will be given an official Rector's Decree or an official Institutional Assignment Letter.

In addition to the division of the role of journal managers in the discussion, it was also agreed on what services must be available at the university level to support the acceleration of existing journals leading to reputable international journals. From the results of the discussion, it was found that 12 minimum services that are important and must be provided in journal management at the university level are: online ISSN registration, print ISSN registration, DOI activation, Garuda registration (archiving), DOAJ registration, Dimension registration, Arjuna registration (New Accreditation), Arjuna registration (Re-Accreditation), Scopus registration, Web of Science (WOS) registration, Virtual Account (VA) publishing service, and official certificate issuance for journal managers and journal reviewers. These services are equipped with procedures to make it easier for users and actors to work according to their respective roles. This service is structured to ensure that centralized journal management can be carried out optimally and consistently to achieve continuous improvement. As an example of VA services, VA services ensure that all financial aspects are deposited in 1 official account, namely a university account, so that the accountability and recapitulation of university income can be monitored in an orderly and measurable manner, as shown in Figure 1.

From the business aspect, at UNNES, the journals are designed in 2 schemes: paid journals and unpaid journals. Unpaid journals are where the funding scheme is financed purely from university commitment funds. In contrast, paid journals are independent journals that can contribute to the operational costs needed in journal management. The era of university independence also demands that universities have income-generating opportunities. One income-generating opportunity for universities can also come from the journal "business." Therefore the scheme for paid journals must determine the profit contribution (margin) for income-generating universities outside of their own operational needs. The proposed margin/profit design of the university journal "business" must also be regulated. In the proposed discussion scheme, the proposed margin is adjusted according to the journal's rank/level, including international journals in quartile one ranking, the margin determined is 40% of the rate given by the university, journals ranked quartile 2 with a margin of 35%, quartile 3 with a margin of 25%, quartile 4 with a margin of 20%, journals SINTA 1 and SINTA 2 with a margin of 15%, journals SINTA 3, 4, 5 and 6 with a margin of 10%, and the journal SINTA 0 with a margin of 5%. However, this margin proposal will be evaluated annually as well as the rate given, namely whether the rate given is

within the reasonable limits because the primary purpose of this journal is to serve as a forum for scientific publications, not just profit. The set margin is intended to finance operational journal costs (fixed costs) that must be borne if the journal is not able to reach the target number of articles and to finance the policy of allowing free articles to be entered in journals in the paid category because to increase journal ratings, providing incentives for journal managers, and support university independence.

Table 1. *Table of the Division of Roles and Positions of Journal Managers at Universitas Negeri Semarang*

| Actor	Roles	Position
Editor in Chief	Drafting guidelines, compiling and leading the editorial board, assigning the editorial board to pre-review articles, writing editorial notes, managing budget, and entirely responsible for issue publications.	Unit
Section Editor	Selecting and determining the manuscript that will be assigned to the reviewer according to the issue theme determined by the editor-in-chief, according to the reviewer's recommendation stating the manuscript is accepted or still needs revision or even rejecting, conducting a pre-review before assignment to the reviewer (note the maximum limit to be assigned to the reviewer), is responsible to the editor in chief on the quality of publication on the published issue.	Unit
Guest Editor	Ensuring the manuscript follows the guidelines correctly, ensuring that the intellectual content of the manuscript is following the issue of the journal, ensuring that the publication process runs well, and responsible for the managing editor, both the editor section and the editor in chief, after the process is complete, the process is returned to the managing editor, namely the editor section or editor in chief.	Unit
Reviewer	Conduct a review following the guidelines and scope of the journal, provide recommendations to the editor to accept or reject the manuscript, and provide input (or request) to the author to make improvements to the manuscript according to the journal's vision and mission.	Unit
Layouter	They are layouts articles in both electronic and print versions.	Unit
Proofreader	Proofreading is rereading the manuscript and editing the article to ensure that the writing and grammar follow the language rules used in the journal.	Unit
Translator	They translate the language according to the desired language in the article writing guide in the journal.	Unit
Turnitin checker staff	Perform testing or check the similarity test using the Turnitin software or application that has been subscribed to by UNNES.	Unit
Finance staff	They care for all finance-related matters, from planning, implementation, and administration to SPJ at the Journal and Publication Center of UNNES.	University
IT staff	Ensure all IT systems, data and backups run optimally for UNNES journal and publication services.	University
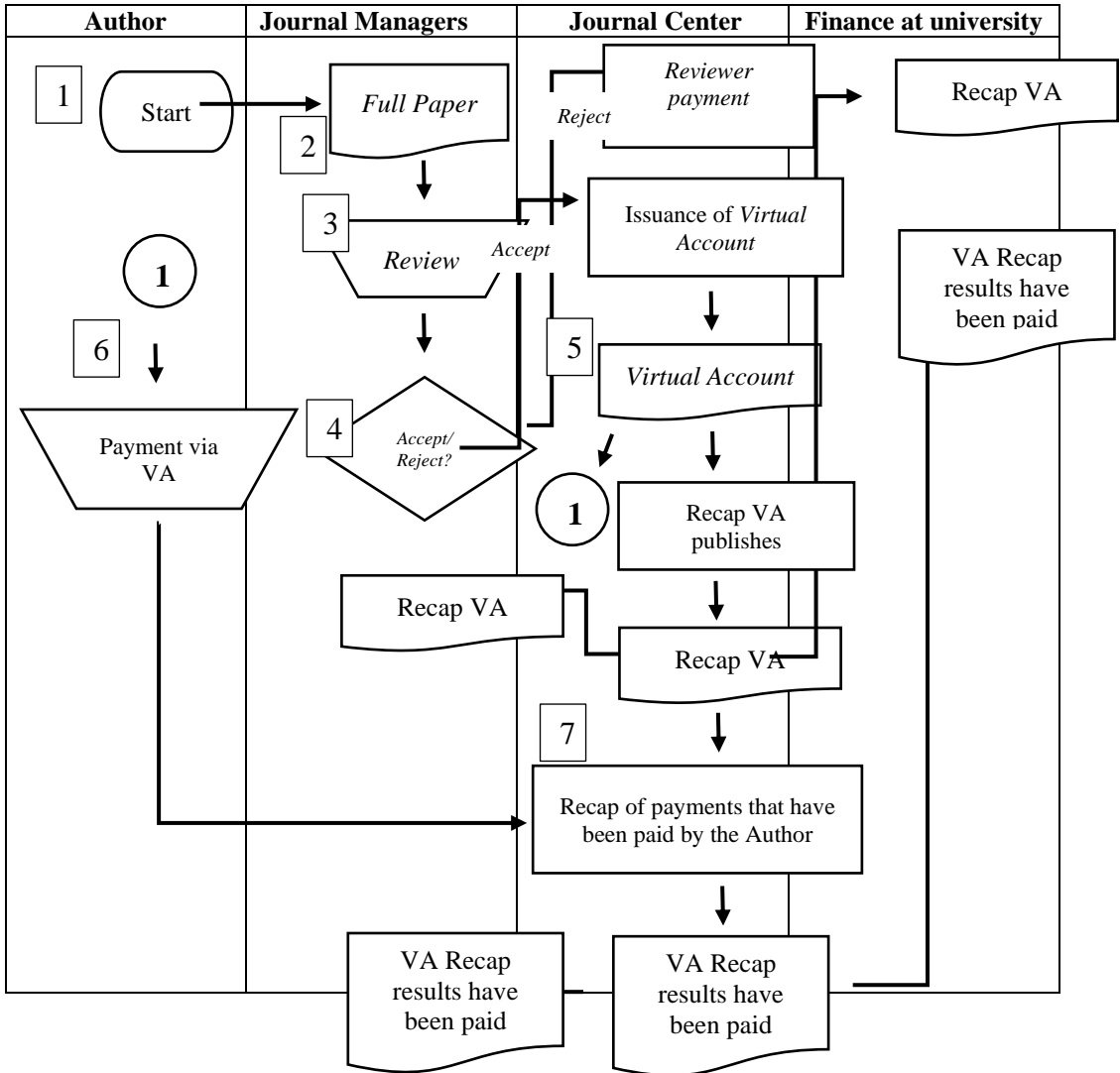
Fig. 1. *The procedure of the issuance service of Virtual Account (VA)*

4 Discussion

Professional journal management has become a demand in developing the university's business and moral and academic responsibility to present articles of excellent quality. This quality is inseparable from the exemplary role of the journal manager (human resources involved) and the service system implemented, including infrastructure and the development of supporting information systems. This condition is following the standards of the Minister of Research, Technology and Higher Education of the Republic of Indonesia No. 9 of 2018 regarding Accreditation of

Scientific Journals. It states that good electronic journal governance standards require publishing articles that contribute to the related science, qualified journal editors and reviewers, using Bahasa Indonesia or the official language of the United Nations, and maintaining a consistent writing style. Moreover, good electronic journals should be managed and published according to schedule and have electronic ISSN and DOI numbers.

In addition, the Open Access Journal (OAJ) policy also requires journal managers to understand the principles of application, aspects of publishing online journals, prepare and review policy guidelines, ensure policy statements on journal sites, conduct socialization, share knowledge with interested parties, review policies for each online journal, and improving the ability of librarians in managing journals. Journal governance must be balanced with increasing professional competence by participating in OJS, DOI, journal indexation, publishing management, journal accreditation assistance, library e-resources management, managerial leadership, digital literacy, and research literacy [14].

Therefore, journal managers need to improve the quality of journals with good governance in managing journals to achieve those prestigious titles. In the journal management system, not only receiving and reviewing articles but also many aspects need to manage, including administration and financial management. In Indonesia, the national government encouraged universities to upgrade their journal into nationally accredited and internationally reputable so that Indonesian journals could compete with other countries [15]. Widarjo et al. [16] identified some problems related to the journal management system that hinder the journal from upgrading its status. Bad governance of the journal includes publication is not on time, slow response and feedback of articles to the authors, lack of financial sources, and limited staff to manage all the administrative and financial things [16,17].

With thousands of Indonesian journals, only some of them are international and high-indexed journals, while the rest are low quality. This article proposes innovation in journal management, mainly administrative and financial management, by simplifying the work and procedure and its information technology for better performance, transparency, and accountability. To answer the objective of this paper, we will elaborate on governance in the public sector, mainly on the journal service system and role sharing in organizations. Governance is the most common word when discussing the public sector. The other word which describes a similar situation is management. Governance has transparency principles and accountability, as Almquist et al. [18] elaborate on the transition from a new public management to new public governance in which journal management has the same concern because involving many stakeholders, such as authors, reviewers, and managers themselves. As the public sector organization is more complex than before, organizational-knowledge management and decision-making must be addressed more systematically by the public institutions [19]. Two points that need to be discussed are performance management and evaluation models in line with the accountability principle.

The principle of financial management in public institutions is transparency and accountability. Financial management or accounting system development will benefit the stakeholders [20]. Public institutions need budgetary accounting to manage budget appropriations, and the development of the accounting system could differ depending on its function in each institution [21]. Hendriks [22] stated that

developing countries are exploring new methods to improve the public financial system's performance into more modernized, efficient, transparent, and accountable. Moreover, South Africa applied IFMIS (the Integrated Financial Management Information System) as a sign of good financial system governance transformation. In other countries, Vickland & Nieuwenhuijs [23] identified critical factors that have contributed to the successful implementation of a public financial management information system in the Republic of Bosnia and Herzegovina. Indeed, it was difficult for the country to adapt to the new advanced system, but the response was positive despite the obstacles.

5 Conclusion

Centralized and professional journal management, especially those with orientation to university business development, requires a minimum of 10 types of clear key role divisions, namely: editor in chief, section editor, guest editor, reviewer, layouter, proofreader, translator, and Turnitin admin, while admin their finance and IT admin is located at the university level. Essential services that must be developed at least include 12 service systems, namely: online ISSN registration services, print ISSN registrations, DOI activation, Garuda registration (archiving), DOAJ registration, Dimension registration, Arjuna registration (New Accreditation), Arjuna registration (New Register), Arjuna registration (Re-Accreditation), Scopus registration, Web of Science (WOS), Virtual Account (VA) issuance service, and issuance of official certificates for journal managers and journal reviewers. The recommendation from this research is to develop an information system that could accommodate the expected service system and the role of key actors of journal management both at the unit and university levels. This is important because those key roles are interconnected outside the OJS development to improve journals' performance and business processes in support of the era of university independence.

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