# Optimization of Proposal Management Arrangements as Learning Tools in Scientific Research Activities

Rudy Harjanto<sup>1</sup>, Edward Boris P. Manurung<sup>2</sup>, Arini Dwi Lestari<sup>3</sup>

<sup>1</sup>Universitas Prof Dr Moestopo (Beragama), Jl. Hang Lekir I, Tanah Abang, Jakarta Pusat <sup>2</sup> Swiss German University, The Prominence Tower, Jl. Jalur Sutera Barat Kav 15, Alam Sutera <sup>3</sup> STMIK Raharja, Jl. Jendral Sudirman No.40 Modernland, Cikokol, Tangerang e-mail: <a href="mailto:harjanto@aptisi.or.id">harjanto@aptisi.or.id</a>, <a href="mailto:edward@aptisi.or.id">edward@aptisi.or.id</a>, <a href="mailto:arini@raharja.info">arini@raharja.info</a>

## **Abstract**

For a researcher, compiling or managing a research proposal is a significant step because this step dramatically determines the success or failure of all research activities. For this reason, management is needed from a management research activity, because it is one of the activities that are scientific. Management of research proposals or often referred to as research planning is one example of a management report that is described in detail from the study design that will be carried out to answer existing problems. In a term, there is an understanding of a proposal. It seems that a study is not only intended for individuals because the proposed word implies that something is still waiting for an answer or permission from another party. It is expected that with the management of a scientific research activity management has a clear purpose, which later can be useful as a study material about a matter and most importantly as a reference in making decisions for the benefit of the public or the government or private parties or companies.

Keywords: Management, Research, Research Activities

#### 1. Introduction

For a researcher, compiling a management research proposal is a significant step because this step dramatically determines the success or failure of all research activities [1]. Research activities are one of the activities that are scientific. So-called because in the process of making and delivering it has genuine differences with the forms of other writings, such as novels, stories, and poetry. This difference appears in the manufacturing process which is based on existing methodologies and theories so that it cannot be implemented and made carelessly. Also, scientific research scientific research has a clear purpose, which later can be useful as a study material about a matter and most importantly as a reference in making decisions both for the benefit of the public or government or private parties or companies [2]. When starting research, researchers usually need support or sponsorship from certain parties. Students who will make the final assignment require a lecturer as their supervisor. Likewise professional researchers, where they desperately need support in the form of funds from parties who need the results of the research [3]. From these conditions, something that can be used as a reference is needed to assess the researchers or potential supporters or sponsors (Mudrajad Kuncoro, 2009) [4]. Management of research proposals can help give direction to researchers to be able to suppress errors that might occur during the research process. Proposals have a significant meaning for each researcher to accelerate, improve, and maintain the quality of ·

research results. Management of research proposals is a detailed description of the process that will be carried out by researchers to be able to solve research problems [5]. In general, research proposal management is a guideline that contains steps that will be followed by researchers to conduct research.

## 2. Research Method

Before someone starts with research activity, he must make a written plan which is usually called research proposal management [6]. In that term, there is an understanding of a proposal. It seems that research is not for itself because the proposed word means that something is still waiting for an answer or permission from another party. Indeed, if interpreted literally, this is true. There are times when a proposal does have meaning like the meaning of the word. However, for research activities in general, research proposal management has another position [7].

Management of research proposals or often referred to as research planning is a detailed description of the study design that will be carried out to answer existing problems [8]. This includes the hypotheses to be tested, the details of the research phase including the collection and analysis of data, and the estimated time required for conducting the research. Management of research proposals is also formal communication between managers (parties who request proposals) with researchers (those who make proposals) [9]. Written and formal proposals are the culmination of manager and researcher interactions, where management's attention has been poured into management problems and further as research problems [10].

Suharsimi Arikunto (2010: 9) states that research proposals must not only be made by students of thesis, thesis or dissertation, but by anyone who will conduct research. For students, the research proposal that has been approved by the supervisor is a guide to the things that must be done while conducting research [11]. In this case, the proposal is a proposal. For research, not students whose research activities receive cost support from other parties (for example, research lecturers who receive financial support from their institute or university, as well as order research), the proposal is a description of the research activities to be carried out [12]. The proposal can be explored whether the plan is good or not so that the party who will provide the fee can use the proposal as a benchmark for accepting or rejecting the proposed research plan [13].

Regarding researchers, writing good research proposal management has certain advantages, namely (Kuncoro, 2009) [4]:

- Equality of perception problems. Proposal management of research that has received manager approval shows that there is already a common perception of research problems between researchers and managers.
- 2. Overall research orientation. Writing research proposal management makes researchers have to think critically about all aspects of research before conducting research.
- 3. Guidelines for conducting research. Research proposals that have been approved by the manager can be used as planning studies and become guidelines for implementation.
- 4. Clarity of research activities. By using a good proposal, the research activities to be carried out are clear.
- 5. Ease of evaluation of research. The proposal will facilitate the evaluation of the proposed research for both researchers and other related parties.

**ATM** Vol. 2, No. 1 January 2018 : 55-62

- 6. Protection of research implementation. Proposals can protect from 'interfering' with others when the research is underway.
- 7. Approval of researchers and managers. The proposal can also function as an agreement document between the researcher and the manager.

## 3. Results and Analysis

In making the management of research proposals a different research proposal format is needed, it depends on the research objectives and the intended institution, but generally, the components proposed are the same [14]. The proposal is a map of activities. In the map, the researcher can trace the direction of the compilation mind to realize his plan. There are 21 (twenty-one) components which are included in the research proposal management section, which consists of:

No	Component	Description
1	Title page	Concise, substantial meaning the title must reflect the nature of research and informative for readers, sponsors, or supervisors.
2	Executive Summary	The executive summary is another form of the research proposal that is presented concisely and concisely so that it is possible for the sponsor to know the intent and purpose quickly and precisely.
3	Table of Contents	The table of contents provides an outline of the proposed component in addition to providing a list of illustrations, tables, attachments, and so on.
4	Introduction	An opening statement that explains what is proposed can help the reader understand the subject being discussed (Sulistiyo Basuki, 2010) [15].
5	Abstract	Generally, the research proposal provides a summary, extract, or abstract of 200 words. Exceptions to the proposed thesis, thesis, and dissertation. Abstracts should allude to the main components of the research proposal except for the budget.
6	Background	In this section, it contains the history and events that are happening on an object of research, but in that event, now there appear to be deviations or gaps from existing

		standards, both scientific and regulatory standards (Sugiyono, 2011) [16].
7	Identification of problems	Identification of problems must be carried out realistically, reasonably, considered essential to be followed up, and considered capable of being implemented.
8	The scope of the problem	Because of the limitations of time, funds, energy, theories, and so that research can be carried out in more depth, not all problems that have been identified will be examined.
9	Formulation of the problem	A problem can be described coherently and focus on producing the final word of a problem that can be captured and understood by the reader.
10	Research purposes	The purpose of the study is closely related to the formulation of the problem written. In compiling the objectives of the study adjusted to the order of goals according to the interests in general, only followed by specific objectives.
11	Usability of Research Results	The usefulness of the results of this study is two things (Sugiyono, 2011) [13]: usefulness for developing theoretical knowledge or usability, and practical uses, namely helping to solve and anticipate problems that exist in the object under study.
12	Literature Review	The discussion in this section should begin by discussing the related literature and literature and the relevant secondary data from a comprehensive perspective, then new more specialized studies that have to do with the problems studied.
13	Relevant Research Review	This section looks back at all the research that has been done before or is being done, which has a relationship with the research that will be conducted.
14	Research Hypothesis	Because the hypothesis is a temporary answer to the research problem formulation proposed.

15	Research methodology	To answer the problem formulation and test the hypothesis a research methodology is needed.
16	Population and Samples	In the research population and samples need to be explained which can be used as data sources.
17	Research Instrument	Research that aims to measure a symptom will use research instruments.
18	Research design	The research design describes what researchers will do in technical terminology.
19	Data collection technique	What is needed here is which data collection techniques are the most appropriate so that data is valid and reliable?
20	Teknik Analysis Data	For research with a quantitative approach, the data analysis technique is related to the calculation to answer the problem formulation and test the proposed hypothesis.
21	Report Form	The format of the report that will be displayed as the final form of submitting the results of the study also needs to be explained in the proposed research.
22	Research Qualifications	In this section, it will identify who is involved in the implementation of this research process.
23	Research Budget	In research, it must be known precisely what items are budgeted for in conducting the research.
24	Research schedule	This schedule needs to be made to show an overview of when and how long the period needed to carry out each step in the study.
25	References	All research activities require references or literature from many sources.
26	Attachment	The annex is intended to contain things that need to be explained in the study.

Several factors need to be considered so that a proposal can quickly get the attention of the sponsor. First, the proposal must be presented neatly, structured, organized. Second, the main topics of the proposal should be found and understood quickly and easily. For this reason, the proposal must have specific guidelines [17]. Important aspects of the technique of proposal writing are:

- 1. Formulation of the problem must be easy to understand.
- 2. Design research should have a scheme and be based on a clear methodology.
- 3. Express the importance of such research well so that sponsors are interested in providing support.
- 4. The objective section and the results of the study should be able to communicate the concrete results to be obtained and their usefulness precisely from the results of the study to be conducted.

#### 4. Conclusion

Management of research proposals is a proposal submitted by someone or an agency or organization or company to produce a specified output or provide research services to sponsors or supporters. The research proposal is formal communication between managers (those who request proposals) with researchers (those who make proposals). In general, research proposal management is a guideline that contains steps that will be followed by researchers to conduct research. A proposal or often referred to as a research proposal is a written statement regarding the plan or management of the overall research activity. The general objective of research proposal management is to clearly explain the purpose of the research, who will be met, and what will be done or sought at the research location.

In the development of each research proposal, it is necessary to evaluate both implicitly and explicitly.

Evaluation Coverage	Rated Points
Formulation of the problem	<ul> <li>There is a transparent background to the problem</li> <li>There is a condition specification that guides the problem statement</li> <li>The proposal shows that researchers master the complexity of the problem</li> </ul>
Research strategies and methods	<ul> <li>Research strategies to solve problems are shown concisely</li> <li>The reason for choosing the strategy is clearly stated</li> <li>The reason for choosing the strategy is clearly stated</li> <li>The accuracy of data search procedures</li> <li>The accuracy of the data analysis proposal</li> </ul>
Estimated research results	<ul> <li>Outline of information to be obtained</li> <li>Proposed research results to answer the research objectives</li> </ul>

Budget and research schedule	<ul> <li>Consideration of research time</li> <li>Budget considerations</li> <li>Research has sufficient value compared to the sacrifice of time and energy</li> </ul>
Researcher's background	The qualifications and experience of the researcher indicate that the person concerned can carry out the research well
Overall evaluation score	Evaluation of total evaluation coverage from one to five

### References

- [1] Sunarya, P. A., Nurhaeni, T., & Haris, H. (2017). Bank Reconciliation Process Efficiency Using Online Web Based Accounting System 2.0 in Companies. *Aptisi Transactions of Management (ATM)*, 1(2), 131-136.
- [2] Supriati, R., Aryani, D., & Maesaroh, S. (2017). Asset Management Using a Web-Based Accounting Online System To Maintain Value of Company Assets. Aptisi Transactions of Management (ATM), 1(1), 34-41.
- [3] Rahardja, U., Aini, Q., & Faradilla, F. (2018). Implementasi Viewboard Berbasis Interaktif Javascript Charts Pada Sistem Penilaian Perkuliahan. Jurnal Ilmiah Teknologi Informasi Asia, 12(2), 91-102.
- [4] Kuncoro, M. (2009). Mtode Riset untuk Bisnis dan Ekonomi bagaimana meneliti dan menulis tesis edisi ke tiga.
- [5] Rahardja, U., Aini, Q., Azizah, N., & Santoso, N. P. L. (2018). Efektivitas Akuntansi Online dalam Menunjang Proses Rekonsiliasi. *Nusantara Journal of Computers and its Applications*, 3(2).
- [6] Rahardja, U., Aini, Q., Ariessanti, H. D., & Khoirunisa, A. (2018). Pengaruh Gamifikasi pada iDu (iLearning Education) dalam Meningkatkan Motivasi Belajar Mahasiswa. *Nusantara Journal of Computers and its Applications*, 3(2).
- [7] Rahardja, U., Aini, Q., & Khoirunisa, A. (2017). Implementasi Business Intelligence Menggunakan Highchart pada Sistem Penilaian Absensi berbasis YII Framework. CSRID (Computer Science Research and Its Development Journal), 9(2), 115-124.
- [8] Rahardja, U., Harahap, E. P., & Dewi, S. R. (2019). The Strategy of Enhancing Article Citation and H-Index on SINTA to Improve Tertiary Reputation. TELKOMNIKA (Telecommunication Computing Electronics and Control), 17(1).
- [9] Rahayu, N., Lestari, F. H. N., & Aprilyani, U. T. (2017). Clothing Sales Information System Web-Based: "Bluelight Distro". VOLT: Jurnal Ilmiah Pendidikan Teknik Elektro, 2(1), 55-62.
- [10] Rahardja, U., Moein, A., & Lutfiani, N. Leadership, Competency, Working Motivation and Performance of High Private Education Lecturer with Institution Accreditation B: Area Kopertis IV Banten Province. Man India, 97(24), 179-192.
- [11] Arikunto, S. (2010). Penelitian Suatu Pendekatan dan Praktek. PT Rineka Cipta Jakarta.
- [12] Aini, Q., Rahardja, U., Moeins, A., & Apriani, D. M. (2018). Penerapan Gamifikasi pada Sistem Informasi Penilaian Ujian Mahasiswa Untuk Meningkatkan Kinerja Dosen. Jurnal Informatika Upgris, 4(1).
- [13] Rahardja, U., Lutfiani, N., & Rahmawati, R. (2018). Persepsi Mahasiswa Terhadap Berita Pada Website APTISI. *SISFOTENIKA*, 8(2), 117-127.
- [14] Rahardja, U. (2009, May). Artificial informatics. In Industrial Electronics and Applications, 2009. ICIEA 2009. 4th IEEE Conference on (pp. 3064-3067). IEEE.

·

- [15] Basuki, S. 2010. Metode Penelitian. Edisi 2. Jakarta: Penerbit Penaku.
- [16] Sugiyono, P. (2015). Metode penelitian kombinasi (mixed methods). Bandung: Alfabeta.
- [17] Guritno, S., & Rahardja, U. (2011). Theory and Application of IT Research: Metodologi Penelitian Teknologi Informasi. Penerbit Andi.
- [18] Aini, Q., Rahardja, U., & Naufal, R. S. (2018). Penerapan Single Sign On dengan Google pada Website berbasis YII Framework. Sisfotenika, 8(1), 57-68.
- [19] Rahardja, U., Aini, Q., & Enay, N. (2017). Optimalisasi Dashboard pada Sistem Penilaian Sebagai Media Informasi di Perguruan Tinggi. Sisfotenika, 7(2), 167-176.
- [20] Aini, Q., Graha, Y. I., & Zuliana, S. R. (2017). Penerapan Absensi QRCode Mahasiswa Bimbingan Belajar pada Website berbasis YII Framework. Sisfotenika, 7(2), 207-218.
- [21] Aini, Q., Febriyanto, E., & Pratama, D. (2017, August). PENERAPAN TEKNIK GAMIFIKASI DALAM BENTUK SENDING GIFTSUNTUK MENINGKATKAN TRAFFIC RANK. In SISITI: Seminar Ilmiah Sistem Informasi dan Teknologi Informasi (Vol. 5, No. 1).
- [22] Aryani, D., Aini, Q., & Armansyah, F. S. (2017). Perancangan Android Package Mobile Web pada Sistem Penilaian di Perguruan Tinggi. SISFOTENIKA, 7(2), 155-166.
- [23] Rahardja, U., Aini, Q., & Thalia, M. B. (2018). Penerapan Menu Konfirmasi Pembayaran Online Berbasis Yii pada Perguruan Tinggi. Creative Information Technology Journal, 4(3), 174-185.
- [24] Rahardja, U., Aini, Q., & Santoso, N. P. L. (2018). Pengintegrasian YII Framework Berbasis API pada Sistem Penilaian Absensi. SISFOTENIKA, 8(2), 140-152.

**ATM** Vol. 2, No. 1 January 2018 : 55-62