Synthesis of Developing A ZOPP Training Model Using Participatory Action Methodology

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Abstract
This research focuses on project planning using ZOPP which is planning based on the objectives. The principle of ZOPP is, if the project’s objectives are clear and correct, it will result in better processes and results. The purposes of this research were as follows, 1) to develop a training package for project planning on the ZOPP model using participatory action methodology through Google Apps, and 2) to evaluate the appropriateness of the developed training package. The research procedures consisted of 3 phases as, phase I : synthesize the model of project planning on the ZOPP using participatory action methodology through Google Apps by in-depth interviews from 5 experts, phase II : develop the training package for project planning on the ZOPP model using participatory action methodology through Google Apps, and phase III : evaluate the appropriateness of the developed training package using questionnaires from 5 experts. The results revealed that the synthesized model consisted of 4 modules as follows, 1) Project planning on the ZOPP Module, which compounded on 2 parts as, 1.1) ZOPP Module for project planning on the ZOPP covering 3 phases : Analysis Phase, Project Planning Matrix Phase, and Plan of Operations Phase, 1.2) Participatory Module of group work on the ZOPP was comprised of 4 methods : Mind Map writing, Three-Step Interviews, Buzz Group, and Gantt Chart writing, 2) Robert E. Stake Evaluation Module for project evaluation was used which focused on the 3 following aspects : Antecedents, Transaction, and Outcome Parts. And the developed training package through Google Apps consisted of 5 topics, 1) Introduction to project planning, 2) Project planning on the ZOPP, 3) Analysis phase, 4) Project planning matrix phase, and 5) Plan of operations phase. The appropriateness of the developed training package from 5 experts was found to be at a high level. In conclusion, this can be used to develop training packages for targeted groups properly.

Keyword: A training model, ZOPP Training Model, Participatory Action Methodology

1. Introduction
Problems, needs, and opportunities continually arise in every organization. Problems like low operational efficiency, needs like additional office space, and opportunities like penetrating a new product market are just a few of a nearly endless number of situations that management must address in the process of operating a department or organizations. These problems, needs, and opportunities give rise to the identification of solutions. Executing those solutions entails a change for the organization. Projects are generally established to carry out this change and there’s always someone responsible for the successful completion of each project. As the project manager, who are the primary change agent, and guide for carrying out the change is the project management process. (Heerkens, 2002: 9)Meanwhile, the “Planning Stage” is an important step in the management of departments or organizations especially for project management. Good project management reflects the ability to manage and perform effectively.
It deals with two important principles: the project is right and correctly implemented (Heerkens, 2002: 97). Correct project implementation requires an effective planning stage to finally achieve success. Therefore, it can be said that the planning stage affects is a critical step in the success or failure of a project because planning is a predetermined decision to choose things: material, or method objectives or means of action. In general, this will answer the following questions: what, why, who, when, where, and how. Therefore, it is evident that the planning stage is a very important part of project activities because planning is a decision-making process for future actions with the focus being on achieving the main goal of the organization (Anan, 1996: 3-4). There are several benefits to good project planning such as the coordination of the staff work, there being a plan of action, saves administration resources, enables fast and efficient execution of operations, lightens the load of the supervisor work, ability to properly and effectively mobilize resources, ability for supervisors to easily control the operations with the supervisor able to know the barriers caused by the performance and able to promptly solve the problem (Department of Livestock Development, 2009). Project planning thus, is important for the development of a department or organization. It also involves a large number of personnel in coordinating and cooperating the implementation of the project to achieve the target project or for the stakeholder concretely and effectively. However, the past department operations have often been the responsibility of the planning department. Most of them are small groups of people who set and run the project alone resulting in the project implementation results not being successful (Mayuree, 2003).

ZOPP, from the German term "Ziel Orientierte Projekt Planung," translates in English to "Objectives-Oriented Project Planning." ZOPP is a project planning and management method that encourages participatory planning and analysis throughout the project cycle with a series of stakeholder workshops. The technique requires stakeholders to come together in a series of workshops to set priorities and plan for implementation and monitoring. The main output of a ZOPP session is a project planning matrix, which stakeholders build together. The purpose of ZOPP is to undertake participatory, objectives-oriented planning that spans the life of project or policy work to build stakeholder team commitment and capacity with a series of workshops. (GTZ, 1991) Furthermore, ZOPP is a process that relies heavily on two particular techniques—matrix building and stakeholder workshops—to encourage participatory planning and management of development work. ZOPP helps a project team create a project planning matrix (PPM), similar to a Logical Framework or LogFRAME, to provide in-depth analysis of project objectives, outputs, and activities. The PPM results from stakeholder workshops that are scheduled through the life of a project to encourage brainstorming, strategizing, information gathering, and consensus building among stakeholders. (Kirkpatrick, 1996) ZOPP planning consists of three related processes: 1) Methodology using a common planning system, 2) Team Approach by continuously periodic planning for each step, and 3) Visualization technique recorded results of planned operations throughout the process. Because the ZOPP project planning focuses on joint planning as a group, the concept of participatory practices was implemented to serve as the design and implementation of projects by focusing on the involvement of the personnel involved and project implementation assessment concept by Robert E. Stake, which has been widely recognized were used in this research to achieve maximum efficiency. This was done by targeting and assessing each performance compared to the target action (Sopsun, 2013). The objective of this research was to synthesize the first phase of the model to provide training to relevant personnel providing knowledge, skills, and experience in planning a project. This is done by selecting samples from personnel in institutions because education institutions are multipliers that play a vital role in the production of efficient graduates. Therefore, this knowledge can be used to effectively plan the project along with their regular duties which would likely enable the educational organization to effectively drive educational activities according to the mission, vision, and educational management philosophy of the institution. They can also answer the indicators of educational quality assurance of educational institutions in a timely and effective manner. It is expected that the results of this research will be the knowledge that contributes to the dissemination in the academic world, both national and international. Because the conceptual framework of this research is a mix of spatial planning. The use of participatory action methods and the application of project evaluation methods in accordance with the guideline of the stake. However due to the development of this training package, there is a need to synthesize first because planning is a open-plan. The user can fuse any innovation into the project. Therefore, it is necessary to synthesize the development model of a training package for planning of a project using a participatory action method to adopt a model that has been appropriately assessed by experts.
2. The conceptual framework of the research

Conceptual framework of this research involves several innovations as follows:

Project refers to a process of activity that consists of several activities, which are implemented in sequence, by which work must be based on a set purpose such as production or service with the defined limited time and budget with people responsible for the project to ensure that the various activities according to the plan, suitable for time and budget set. ZOPP is pronounced "SOPP" in German wording which is an abbreviated from the term "Ziel Orientierte Projek tPlanung" referring to "objective-oriented planning", a German planning technique. Therefore, ZOPP means to project planning by maximizing the project objectives. The purpose of the project does not focus on project activities or outcomes. It is believed that if the objectives are clearly and accurately defined, it will result in efficient processes and results. (Sopsun, 2013). Objective-based planning is the opposite of any kind of planning that is intended to take place or to be achieved without any certain goal, for example, you want to sell the product as much as possible without a target and plan how much you will be able to sell, then make the most out of it to sell as much as possible. This is a plan that might be academically incorrect. Tools are both systems, procedures and tools for project planning with a focus on the main purpose and another planning technique originally used in the official project planning system of the German Technical Cooperation (Deutsche GesellschaftFuer Technische Zusammenarbeit) or GTZ (German Agency for Technical Cooperation). Project planning is a set of three interrelated processes as follows:

1. Methodology using a common planning system
2. Team Approach by continuously periodic planning for each step
3. Visualization technique recorded results of planned operations throughout the process.

The objectives of Objective Oriented Project Planning by ZOPP Module are adopted to encompass the followings:

1. To identify project objectives and logical framework for long term use.
2. To improve communication system and collaboration between GTZ head office and GTZ funded Institutes by co-planning and identifying developed projects including the orderly documentation of information.
3. To scope the responsibility of the groups of operator of the funded projects. (GTZ, 1991)

There are 3 steps to carry out the goal oriented project planning by a ZOPP Module;

1. Analysis step, which comprises of
   1.1 Participation Analysis, participants are selected from diversifying competence but know deeply about what they are going to do.
   1.2 Problem Analysis, the core of problems has to be identified.
   1.3 Objectives Analysis
   1.4 Alternative Analysis.
2. Project Planning Matrix step, is combined with
   2.1 Objective/Activities.
   2.2 Important Assumptions
   2.3 Objectively Verifiable Indicators.
3. Plan of operations step, is comprised of
   3.1 Identification of plans and duration.
   3.2 Identification of a directive person in charge.
   3.3 Identification of operational budget.
   3.4 Identification of Verifiable Indicators as a basic method of follow up and evaluation. (GTZ, 1988)

Objective oriented project planning by a ZOPP model is project planning mainly focused on objectives because the objectives are the key element in outlining the movement of organizations to step forward along the realistic goals. ZOPP model is an open systematic structure enabling innovation, various methods or different kinds of techniques to combine together, especially the process of participating which is the critical key to carry out the project operation (Chairin, 2002) and project planning by ZOPP model in order to meet achievable goals. In this research, 3 innovations were combined to create a training model for persons in academic groups when planning a project to address problems found in efficiently.
3. Research objectives

3.1 To synthesize the model of developing ZOPP training model for project planning using Participatory Action Methodology.

3.2 To evaluate the fit of the model of developing ZOPP training model for project planning using Participatory Action Methodology.

4. Research scope

4.1 Scope and Content

4.1.1 This research was a synthesized development model of a training set of project planning software using the participatory action method and evaluated according to the Stake’s guideline.

4.1.2 Zeil Orientierte Projekt Planning

4.1.3 Participatory Action Methodology

4.1.4 Project evaluation based on the Stake’s evaluation approach was developed by Robert E. Stake, and used to evaluate projects effectively (Jairuk et al., 2010)

4.2 Scope of the population

4.2.1 The population in this study conducted on issues and needs with 400 administrators; faculty and staff associated with the defense plans in higher education. From the 400 higher education institutions, the questionnaire was used to summarize the course of action and the need to develop training packages.

4.2.2 The population used in the training model development for ZOPP training model using participatory action methodology such as 5 relevant experts by conducting in-depth interviews and structured interviews to find the conclusion of the pattern was conducted. The model validation was then verified for empirical confirmation by the same experts.

4.2.3 The population used in the suitability assessment of the developed training package were 5 relevant experts with questionnaires to assess quality using 5 level scoring.

5. Procedure of conducting the research

This research had 5 conducting procedures as follows;

5.1 Studying documents, research and related text books

The researcher studied concept, principle, process, method, operation and evaluation concerning general project planning and project planning by ZOPP model, participatory action methodology and evaluation of project according to Stake Evaluation Model including other concerned points such as the development of training model, objective analysis and personnel analysis.

5.2 Studying problems and needs

To carry out this procedure, the researcher designed a survey exploring questionnaires to ask questions to management leaders, professors and personnel engaging in planning work in educational institutes, university level totally 400 persons in order to conclude the operational procedure and the need in developing training model of project planning by ZOPP model with participatory action methodology.

5.3 In-depth interview from specialists

After receiving the conclusion of problems and the needs, the total of 5 specialists conducted an in-depth interview. All of them were professors in government universities with a Ph.D degree and had ranked academic position of Assistant Professor with a degree of educational experience of no less than 8 years. The purpose of this interview was to find a conclusion about the training model of project planning by ZOPP model with participatory action methodology under problems and the need to receive from questioning management leaders, professors and personnel who had involvement with planning work in educational institutes, university level. After than the researcher outlined the draft model by synthesizing all pieces of information.

5.4 Evaluating the suitability of draft model

In this procedure, the draft model was used to evaluate suitability of the training model with project planning by a ZOPP model using the same specialists. The outputs in terms of suitability were summarized and analyzed by average and standard deviation with the identification of average score as follows; (Boonchom,1992:100)

4.51-5.00 mean excellent
3.51-4.50 mean good
2.51-3.50 mean moderate
1.51-2.50 mean fair
1.00-1.50 mean poor

5.5 Improvement the model
The last procedure focused on improvement to the training model to become better by considering the evaluation results and suggestions in order to develop the model for the next steps.

6. Results

Picture 1 Training model development of project planning by the ZOPP approach by way of participatory action methodology. The model comprised of 4 modules which have the following details. This research achieved 2 objectives, namely

6.1 Synthesizing outputs of training model development of project planning by a ZOPP model with participatory action methodology as seen in Picture 1
6.1.1 Project Planning on ZOPP Module Consisted of 2 sub-modules which were as follows:
6.1.1.1 ZOPP Module
The researcher brought all procedures of project planning by the ZOPP Module to be used in this research which composed of 3 procedures according to the following 1) Analysis: an overview of persons/organizations, problems and cause of problems, analysis of project objectives and analysis of alternative method of problem solving. 2) Project Planning Matrix: the identification of project objectives/activities, the identification of hypothesis concerning external factor having effect on projects and identification of objectively verifiable indicators and 3) Plan of Operations: the identification of activities plan and duration. The identification of a person in charge and budget. As per the principle of ZOPP with the suggestion that the process of the analysis result in a ZOPP Module was essentially provided with group participating. All procedures of the ZOPP Module as per Number 1 were then supported by every point of the Participatory Module.
6.1.1.2 Participatory Module
It was the module of participatory action methodology which was the process of people in the groups connected to different procedures of the ZOPP Module which composed of;
1) Mind Map Writing or a visual form of note taking that offers an overview of a topic and its complex information of persons or groups in order to sum up in form of problems and causes of problems which planning by ZOPP Module suggested that one should open a chance for persons or groups connected to a project to share their opinion in problem analysis. Therefore, the researcher decided to choose the mind map method operated by a computer program to let the participants work jointly in an operating group.

2) Three-Step Interview is a method allowing participants in groups to take turns in interviewing in order to ask questions, share and test knowledge and understandings at different points. By doing this, the groups would gain the conclusion as a ‘group agreement’ collaborated by all participants which is the most common method widely used in groups of operation.

3) Buzz Group is a group method conducted by official talking, discussion, questioning and sharing knowledge and understanding in order to have a consistent conclusion. This group method has been used widely in conducting group activities to encourage the members in the group to have equal roles.

4) Gantt Chart Writing is a method of writing a chart allowing groups to work jointly in taking consideration in different points and collaborate in writing a Gantt chart for activities following ZOPP Module procedure.

6.1.2 Robert E. Stake Evaluation Module

Structure of Robert E Stake evaluation’s module separates information used for evaluation into 2 parts which are Description Matrix and Judgment Matrix. According to this evaluation module, things to be taken into consideration were separated into 3 parts namely, 1) Antecedents which means conditions and factors involved in project operation such as personnel, course, training model and other related contexts. 2) Transaction which means any activities conducted during the period of training such as progress, achievement, training score and 3) Outcome of operation (Rakjai and others, 2010) as per synthesizing method. Since this was a training model of the ZOPP model, there were 2 separated parts which were the expected learning outcomes after finishing training which was the achievement risen from training shown by the average score from questionnaires after passing the training and projects made by participants in group of 2-4 persons. This was then evaluated by 3 specialists according to Rubric Evaluation Module. In working with Stake Evaluation Module, one needs to first consider information for explanation. It meant that conformity between expected, what happened, relationships of primary factors and outcomes should be studied. Whatever the results, they would be compared with the identified standard and standard expected to happen before making a decision. Therefore, Robert E. Stake Evaluation Module had to identify firstly the principle which under these circumstances following the 3 part of principle. Then conduct a comparison between “Intents and Observations” and “Standards and Judgment”. (Payne, 1994)

6.2 Evaluation results of the suitability of training model of project planning by a ZOPP Module with participatory action methodology was then synthesized.

Table 1: Evaluation results of the suitability of training model of project planning by a ZOPP Module with participatory action methodology

<table>
<thead>
<tr>
<th>List</th>
<th>Mean</th>
<th>SD.</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The suitability of ZOPP used in this research</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>2. The suitability of participatory action methodology used in this research</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>3. The suitability of Robert E. Stake Evaluation Module used in this research</td>
<td>4.40</td>
<td>0.548</td>
<td>High</td>
</tr>
<tr>
<td>4. The suitability of 3 parts (the article 1-2-3 used in this research)</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>5. The suitability of Module number 1</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>6. The suitability of Module number 2</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>7. The suitability of Module number 3</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>8. The suitability of Module number 4</td>
<td>4.40</td>
<td>0.548</td>
<td>High</td>
</tr>
<tr>
<td>9. The suitability of overall Module</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td>10. The suitability of module applied for developing training package</td>
<td>4.60</td>
<td>0.548</td>
<td>Highest</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4.56</td>
<td>0.501</td>
<td>Highest</td>
</tr>
</tbody>
</table>
Evaluation results of the suitability of training model of project planning by a ZOPP model with participatory action methodology was synthesized by 5 specialists from questionnaires according to 5 levels of average and standard deviation revealed. Most of the specialists agreed in the same way that the training model of project planning by a ZOPP model with participatory action methodology synthesized categorize mostly at an excellent level with the exception of 2 lists which were at a good level. From the evaluation results of the suitability of training model of project planning by a ZOPP model with participatory action methodology that was synthesized, it was certain that this module could be used to develop training model successfully.

7. Conclusions

This research was aimed at synthesizing a training model of project planning by using a ZOPP model with participatory action methodology. The purpose was to bring the model from synthesizing stage and evaluate the suitability of specialists to develop a training package accordingly. The specialists mostly agreed that this model had excellent levels of suitability and could be adopted to develop training model for personnel in academic institutes in order to collaborate project planning efficiently. Nevertheless, project planning by a ZOPP model in Thailand is considered as a new innovation which no research has been conducted yet. In the meantime, projects operated under institutes or organizations in Thailand will most likely use Outcome Focused Project Planning or Activity Focused Project Planning which by all means were identified by management level to operational levels. Therefore, operational levels do not have chance to participate in the projects as they should be (Charities Evaluation Service, 2002) which are different from project planning using a ZOPP model which identifies mainly the goals or objectives encouraging all levels of participants. In addition, “ZOPP” is an open model which emphasizes on directive moderators of projects to combine and apply innovation and its procedures in project activities, especially the process of participatory action of persons or groups connected to projects which are considered as the key factor of project planning. So, project planning by a ZOPP model should be an alternative method to make a concrete result for a project planning since nowadays it is agreed that process plays a vital role in operations. Other than increasing the working effectiveness, it also means a combination of difference in seeing the same problem and support collaboration in an organization (Boundless Management Boundless, 2016).

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