The Research and Development Study of Tourism Accounting Dictionary

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Abstract—Although there is an increasing need for comprehensive sources of Tourism Accounting learning and practices, unfortunately, a practical-based reference related to the account names and other Accounting terminology used in this industrial sector is still lack. This study, therefore, aims to develop and test the feasibility of a tourism accounting dictionary by conducting a research and development (R&D) method. The Plomp’s R&D model is adopted which included: 1) preliminary investigation phase; 2) design phase; 3) realization/construction phase; 4) test, evaluation & revision phases; and 5) implementation phase. Data were collected from the accounting staff of the tourism companies throughout Bali Province through a self-administered questionnaire and supported with five interviews. Results indicated that the developed tourism accounting dictionary was valid, practical, and effective in increasing the quality of students’ and practitioners’ learning and practices of tourism accounting.

Keywords—tourism accounting; dictionary; research and development study

I. INTRODUCTION

The focus and scope of Accounting have evolved in recent years, including nowadays, the penetrating of its use in the tourism industry [1]. Accounting has been developed and implemented in various sectors of the tourism industry, for example, on international hospitality networks in Europe, Central Asia, and Africa [2], [3], which have consequences on labor requirements for accounting functions in the sector [4]. However, the results of a literature review conducted by [5] related to the aspects of accounting in the tourism industry indicate that the financial knowledge possessed by human resources in the tourism industry sector is still weak. This phenomenon gives a sign on the need to increase the capacity of the workforce in the financial sector, one of which is related to Accounting, to support the success of the tourism industry.

Meanwhile, the need for reference learning and accounting practices in the tourism sector is relatively high. Reference [6], for example, revealed that the very lack of supporting literature, especially the literature which was able to provide specific information regarding the implementation of Accounting in real conditions in the hospitality business, constrains the learning process of the Hospitality Accounting. On the other hand, the result of the tracer study conducted by [7] shows that more than 30% of graduated students of the Accounting Department Faculty of Economics Universitas Pendidikan Ganesha have worked as accountants in the tourism industry in the province of Bali. Thus, from a praxis perspective, there also arises the potential need for an adequate understanding of aspects of Accounting in the realm of the tourism industry.

Theoretically, the uniformity in the use of accounting systems will indeed lead to a high level of quality of financial statements, primarily when associated with aspects of comparability. However, in practice, different business sectors also have different accounts, so the accounting system needed will also be different. In the tourism industry, for example, reference [8] asserted that the restaurant business would certainly not have a depletion account for the oil drilling machine as in the mining industry, but would need an accumulated depreciation account for furniture, fixtures, and equipment. On the other hand, even within the scope of similar business sectors, for example, in the service sector (hospitality), the need for an account for a hotel will be different from a country club and also different from the needs of an amusement park business. The hotel has income from bedroom rentals, the country club has income from late payment of membership fees, the business restaurant has income from food delivery orders, and the amusement park also has income from the sale of souvenirs.
fees, and the amusement park has income from the amusement park entry fee.

This study aims to develop and test the feasibility of a tourism accounting dictionary. We expect that the results of the study can contribute to the development of Accounting theory, especially in the tourism industry Accounting. The results of the study are also expected to provide a further understanding of Accounting learning strategies and the practice of preparing financial statements in the tourism industry. It is also expected to be a supporting tool for the compilers of the financial statements of organizations engaged in the tourism industry sector. Besides, the teaching activities of accounting courses in the tourism sector also can use the resulted dictionary as a source of reference.

The next section of this article is organized as follows. A review of related works of literature is outlined together with research methodology. Next, the research results obtained are further discussed and closed with the conclusion, recommendation, and limitations of the research.

II. LITERATURE REVIEW

A. Accounting and the Tourism Industry

Accounting plays an essential role in the success of achieving business organization goals. Accounting is recognized as being able to provide (i) accurate records of all organizational financial transactions over a specified period; (ii) accurate records of the value of products sold to consumers and the value of goods obtained from suppliers; (iii) information that are relevant to management in order to improve the financial performance of the organization; and (iv) valuable information for many external users, such as potential investors, creditors, banks, and the others [9]. In the context of the tourism industry's business operations, accounting not only traditionally plays a role in determining costs and internal revenues but also necessarily produces financial information that focuses on aspects of strategic planning that are external in terms [10].

The tourism industry covers four main sectors [11], namely (i) transportation; (ii) accommodation; (iii) support services; and (iv) sales and distribution. The transportation sector plays a significant role in the tourism industry because it allows the transfer of tourists from one destination to another quickly and efficiently either by land, sea, or air. Meanwhile, the accommodation sector includes various forms of hospitality facilities that can be categorized into service groups (for example hotels, guest houses (bed & breakfasts), or inn-travel) and self-catering accommodation (such as campsites, caravans, and villas for rent during holidays, or apartments).

On the other hand, supporting aspects in the tourism industry in the form of supporting services (Ancillary Services) are needed in order to ensure the realization of a sense of comfort and happiness for tourists while on vacation. The product is in the form of facilities or the availability of activities such as catering services, laundry, Wi-Fi areas, or secure access to shopping centers, translators, financial services, and other communication facilities. Finally, the tourism industry also needs an integrated system that allows tourism products to be sold to tourists. This aspect of the sales distribution system is implemented through service providers (including airlines, hotels, and transport companies), wholesalers, and retailers.

Some academics and previous researchers have examined the relationship between Accounting and the tourism industry's business success. Reference [12] states that Accounting plays a vital role in the process of verifying revenues and expenditures in hospitality operating business units through controlling procedures, evaluating controls, and controlling availability. The units referred to are the parts by which services to tourists are produced and, as such, are parts that are directly related to the profit-making purpose, such as bedrooms, bars, buffets, and restaurants. Reference [10] emphasizes the importance of using Accounting in terms of performance measurement in the core elements of the tourism industry practice, namely (i) setting customer-based goals; (ii) operational planning and control; (iii) partnerships and networks; (iv) clear communication both internally and externally; (v) setting and achieving consistent standards; (vi) effective management of the workforce; and (vii) managerial performance and benchmarking.

B. The Concept of Research and Development

The development of learning tools is a series of processes or activities carried out to produce a learning device based on the existing development theory. To be able to say that a learning device has good quality, it needs a criterion. The criteria used to see the quality of the learning tools developed in this study is based on the criteria put forward by Nienke Nieveen. Reference [13] states that three aspects need to be considered in assessing the quality of a product, namely validity, practicality, and effectiveness.

A product is said to be valid if it fulfills content validity and constructs validity. Meeting the content validity means that the product developed is based on a development theory that is used as a guideline, and following the demands of the characteristics of the learning, model applied. Then construct validity can be seen from the consistent linkages of each component of the learning product that is developed with the characteristics of the learning model applied. For this purpose, experts are asked to see the construct validity of learning products. The opinions of these experts are used as a measure of the validity of developed learning products. The second aspect is the practicality. The practicality of the developed learning product can be seen from its implementation in the field. In other words, a learning product can be said to be practical if it can be implemented practically in the field. The third aspect is the effectiveness. The developed learning product is said to be effective if it can achieve the stated learning goals, which, in this case, enhance the understanding of student concepts.

The effort to develop a product in the form of a bilingual dictionary of accounting terminology in the tourism industry is based on the development theory proposed by [14]. Plomp put forward a general model to develop a learning product.
that consists of five stages, namely: (1) initial investigation, (2) design, (3) realization/construction, (4) tests, evaluations, and revisions, and (5) implementation. Figure I depicts the five stages of development schematically.

C. The Previous Relevant Study

Several previous studies have succeeded in developing learning products in the field of Accounting that has proven their reliability as follows:

1) Reference [15] developed a learning media in the form of an accounting pocketbook for vocational students majoring in Accounting with the material "Acquisition and Depreciation of Fixed Assets" through the stages of developing the ADDIE model, that is Analysis—Design—Development—Implementation—Evaluation. The research resulted in accounting learning products with a level of "good" feasibility and proved to be able to increase the motivation of students' target learning.

2) Reference [6] developed a "Chart of Accounts" dictionary for Hospitality Accounting courses, related to Accounting accounts and terms, which are essential components in the mastery of Hospitality Accounting. The development is carried out using the "four D Models" development model which consists of 4 stages of development, namely Define, Design, Develop, and Disseminate. The results showed that the products produced were categorized as "feasible" from the perspective of dimensions (1) Direct evidence (Tangible); (2) Reliability; (3) Responsiveness; and (4) Assurance.

3) Reference [16] designed the Accounting term dictionary by implementing the Object-Oriented Analysis and Design (OOAD) method in the categories of Financial Accounting, Cost Accounting, Budget Accounting, Tax Accounting, Government Accounting, and International Accounting. The results of the study produced an Accounting dictionary design in the form of use case diagrams, activity diagrams, class diagrams, component diagrams, and deployment diagrams.

III. Method

A. Research Design

This study uses a research and development (R&D) approach, which is a type of research that aims to develop prototypes of a research-based tool or device [17] and then test the effectiveness of the resulting product [18]. The research model used refers to the [14] development model, which includes: 1) the initial investigation phase; 2) design phase; 3) realization/construction phase; 4) test, evaluation & revision phases; and 5) implementation phase.

B. Research Procedures

The product development in this study is divided into four stages, each of which is described in more detail as follows:

1) Preliminary Investigation Stage

At this stage, an analysis is carried out to determine the right problems and solutions for product users; that is, students and alumni who work in the Accounting department in the tourism sector. The problem identification process is done by collecting data using a data collection instrument in the form of a questionnaire containing open-ended questions and through interviews about Accounting terminology vocabulary requirements based on the work context, industry groups, and types of financial statements prepared. Initial investigations were also carried out by observing the financial reporting process of several organizations engaged in the tourism sector. The subsequent analysis is carried out in order to identify the form of the product according to user needs.

2) Design Stage

At this stage, an attempt is made to design a possible solution to the problem that has been defined at the initial investigation stage. This stage is reviewing the theories that support to improve the quality of learning and financial reporting in the tourism business. Next, product design is carried out following the learning characteristics and the product user's operational environment.

3) Realization Stage

At this stage, the solution that has been designed is realized to be able to produce an initial prototype. The prototype that was produced was still in the form of prototype 1, which is a bilingual terminology dictionary in the field of Tourism Accounting, which then needed to be tested for its validity, practicality, and effectiveness.

4) Examination, Evaluation and Revision Phase

At this stage, the quality of the products that are successfully realized is realized. The things done are (i) testing the validity of the bilingual dictionary, which is still in the form of the prototype I by two experts (validator) from the Universitas Pendidikan Ganesha. Based on the results of the validation test, it was then revised so that a bilingual dictionary was obtained in the form of prototype II; and (ii)
conducting field trials in order to find out the practicality and effectiveness of the product being developed. Field trial activities are divided into two cycles. Each cycle consists of the stages of implementation, observation, and evaluation, and reflection to see whether the dictionary developed has met the desired criteria. If not, then a revision will be made for improvement.

C. Research Instrument

The instruments used in this study are: (1) product validation sheet, (2) product practicality observation sheet in the form of a user response questionnaire to the product, (3) product practicality observation sheet in the form of a questionnaire validator response to the product, (4) product effectiveness observation sheet learning in the form of tests of user concept understanding, (5) observation sheet of user activity during learning and practice takes place.

D. Collecting Data Technique

The quality of products developed in this study can be seen from three aspects, namely: validity, practicality, and effectiveness.

1) The Validity of Learning Products

The validity of learning products is measured by content validity and constructs validity. The validity of the contents can be seen from the suitability of the learning products developed with supporting theories. The construct validity can be seen from the interrelationship and compatibility between the components of the developed learning product.

2) The Practicality of Learning Products

The practicality of the learning product developed is measured by the implementation of the learning product in classroom learning. Data on the practicality of the developed learning product is obtained from the results of the student response questionnaire and the teacher's questionnaire response to the developed learning product.

3) The Effectiveness of Learning Products

The effectiveness of learning products is measured based on the achievement of learning objectives using developed learning products. To assess the effectiveness of learning products is done by collecting data through the conceptual understanding test scores given after students take part in the learning by using concept understanding tests in the form of question problems and score observation sheet activities of students during the learning process.

E. Analysis of Data Technique

The data collected is analyzed descriptively. The quality of the learning products produced must meet valid, practical, and useful aspects.

1) The Validity of Learning Products

A validation sheet is used to see this validity. In the validation sheet, the validator's opinion is then categorized into four, namely high validity (score 4), good validity (score 3), low valid (score 2), and very low validity (score 1). The steps conducted to see the validity of the learning products developed are as follows

- First, the average score obtained from the validator is determined.
- The average score obtained from each validator is summed and then averaged again until an average total score is obtained.
- The validity of the learning product is determined by converting the average total score into a qualitative value using the following criteria (Table I).

| Range of Average Score | Category       |
|------------------------|----------------|
| 3.5 ≤ Sr ≤ 4.0        | High Validity  |
| 2.5 ≤ Sr ≤ 3.4        | Good Validity  |
| 1.5 ≤ Sr ≤ 2.4        | Low Validity   |
| 1.0 ≤ Sr ≤ 1.4        | Very Low Validity |

The learning products in this study must at least reach a good validity category to be used in learning.

2) The Practicality of Learning Products

The data obtained were analyzed to see the practicality value of the learning products developed; the average score obtained was converted based on the following criteria.

| Range of Average Score | Category        |
|------------------------|-----------------|
| 3.5 ≤ Sr ≤ 4.0        | High Practicality |
| 2.5 ≤ Sr ≤ 3.4        | Good Practicality |
| 1.5 ≤ Sr ≤ 2.4        | Low Practicality |
| 1.0 ≤ Sr ≤ 1.4        | Very Low Practicality |

The learning products in this study must at least reach a good practicality category to be used in learning.

3) The Effectiveness of Learning Products

The effectiveness of the developed learning products can be seen from the students' concept understanding test scores and the observation scores of the students' activities during the learning activities. The students' understanding of concepts is measured using the description test. Data obtained from the test results are then processed using descriptive statistical methods. Besides, the average score of observations of student activity sheets obtained was converted based on the following criteria.
TABLE III
MEASUREMENT OF THE EFFECTIVENESS OF LEARNING PRODUCT

| Range of Average Score | Category          |
|------------------------|-------------------|
| 3.5 ≤ Sr ≤ 4.0         | High Effectiveness|
| 2.5 ≤ Sr ≤ 3.4         | Good Effectiveness|
| 1.5 ≤ Sr ≤ 2.4         | Low Effectiveness |
| 1.0 ≤ Sr ≤ 1.4         | Very Low Effectiveness|

The learning products in this study must at least reach a good effectiveness category to be used in learning.

IV. RESULTS

A. Preliminary Investigation Stage

This stage is focused on the initial analysis or identification of problems as well as the analysis of needs needed in the study of Tourism (Hospitality) Accounting in the classroom and the context of praxis in the workplace. At this stage, the activity of gathering and analyzing information, analyzing the context, defining the problem, reviewing the learning model and ongoing work practices, and planning a follow-up activity is conducted. At this stage, several problems in the study of and the learning tools used on Tourism (Hospitality) Accounting, which took place in the fifth semester of the Accounting Program, Economics Faculty, Universitas Pendidikan Ganesha are reviewed. In addition, the study was also conducted on the work environment of alumni of the Accounting Program, Economics Faculty, Universitas Pendidikan Ganesha, in the tourism industry sectors in the province of Bali. Based on the observation activities, the following things were obtained.

1) In the learning process, lecturers apply the learning model of presentation and group discussion with learning material adjusting to the subject matter in the textbook used. On certain subjects, such as "Cash Accounting for Hotels," "Accounting for Sales at Hotels," "Accounting for Accounts Receivable at Hotels," students are asked to jump into the field in order to obtain a real picture of Accounting practices in the hospitality industry. The results of student observations then become material for group presentations and discussions in class. Through a strategy like this, then students realize that some theoretical material taught in the classroom is not entirely synchronous and relevant to the real conditions in the world of work.

2) In doing assignments and examinations in class, students often only guess the right account names used to record individual transactions that occur in the hospitality industry because the material taught in class is only limited to specific account names.

3) As for students, alumni who work in the tourism industry also experience problems related to the determination of account names in the process of recording certain transactions. Besides, alumni also encounter obstacles when working in contact with different terms in the context of the tourism industry that has never been encountered before.

B. Design Stage

At this stage, an attempt is made to design a possible solution to the problem that has been defined at the preliminary investigation stage, in the form of activity to compiling a draft of learning tools/practical guidelines and instruments needed. At this stage, the researcher designed a bilingual dictionary of accounting terminology in the tourism industry as a solution to the problems found in the preliminary investigation stage.

C. Realization Stage

At this stage, the solution that has been designed is realized to be able to produce an initial prototype. The resulting prototype is in the form of prototype I, which includes a diagram of the terminology in Tourism Accounting and its definition, which furthermore needs to be tested for its validity, practicality, and effectiveness.

D. Examination, Evaluation and Revision Phase

At this stage, prototype I validation was carried out by three experts, namely one lecturer with an accounting expertise background, one Tourism lecturer, and one Learning Technology lecturer from Universitas Pendidikan Ganesha. Validation results indicate the need to add categorization terminology related to the work context, industry groups and types of financial statements prepared. Based on this, a revision of prototype I was carried out to produce prototype II. An overview of prototype II is presented in figure III.

The validation process is then carried out again on prototype II and produces an average score of each validator of 3.441. Thus, it can be stated that the dictionary developed is categorized as having “good validity.” Table IV presents the results of the instrument validity assessment conducted by the experts. In the next stage, a questionnaire aimed at measuring the practicality and effectiveness of learning instruments was distributed to 20 accounting students and ten accounting student alumni. As presented in tables V and VI, learning instruments can be categorized as having “good practicality” (average score = 3.498) and also having “good effectiveness” (average score = 3.486).
This study aims to develop and test the feasibility of a tourism accounting dictionary by using a research and development (R&D) approach. The research model used includes: 1) the initial investigation phase; 2) design phase; 3) realization/construction phase; 4) test, evaluation & revision phases; and 5) implementation phase. At the initial investigation stage, several problems in the study of and the learning tools used on Tourism (Hospitality) Accounting, which took place in the fifth semester of the Accounting Program, Economics Faculty, Universitas Pendidikan Ganesha, are reviewed. In addition, the study was also conducted on the work environment of alumni of the Accounting Program, Economics Faculty, Universitas Pendidikan Ganesha, in the tourism industry sectors in the province of Bali. The problems are related to the student confusion about appropriate terminology used when completing assignments and examinations in the context of tourism accounting in the real world. On the other hand, the alumni also encounter obstacles when working in contact with different terms in the context of the tourism industry that has never been encountered before.

This study develops and designs the tourism accounting dictionary as a solution to the problems identified. The dictionary encompasses tourism accounting terminologies based on the work (occupancy) context, industry groups, and types of financial statements prepared. The assessment for the validity, practicality, and effectiveness aspects of the dictionary indicated that the developed tourism accounting dictionary was valid, practical, and effective in increasing the quality of students' and practitioners' learning and practices of tourism accounting.

This study implies the learning process of tourism accounting. Lecturers in the Tourism Accounting (Hospitality) course need to prepare themselves with a more comprehensive learning guide that is relevant to accounting practices in the tourism sector. Students need to be introduced to the context of the real work environment of the tourism industry. Besides, the latest and innovative references are also needed that can make the learning process to be more efficient and effective.

ACKNOWLEDGMENT

This research was fully supported by the Faculty of Economics, Universitas Pendidikan Ganesha. We are grateful to Mrs. Kusuma Indrani as a Human Resource Manager of “Jimbaran Bay Beach” Resort and Spa for providing us the data that are used in this paper.

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