SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Directors' Cost Allocation in Construction Firm Common Method and AI Method A Case Study of PT WZK

Mohamad Torik Langlang Buana[1*], Agus Sriyanto[2], Tongam Sinambela[3], Deden Tarmidi[4], Safeza Mohd Sapian[5]

[1, 4] Universitas Mercu Buana, Indonesia
[2, 3] Universitas Mpu Tantular, Indonesia
[5] Universiti Sains Islam Malaysia, Malaysia

Article Info

Article history:

Received, 11-11-2024
Revised, 14-11-2024
Accepted, 15-11-2024

Keywords:

Cost Allocation, Board of Directors, Contractors, ChatGPT

ABSTRACT

This study aims to analyze how directors' costs are allocated in a construction services firms. The number of contractors in the country has boasted over 200,000 entities in the last three years, to support the Indonesian government's current focus on infrastructure development. In turn, these companies' success is strongly led by their board of directors. The board of directors' costs in a construction services company are charged to each project using systematic methods to ensure fair allocation. The study employed qualitative methods using a case study of a road construction firm that handles several projects every year. The result of the study found that the firm had a good understanding of management accounting methods and an effective computer accounting system, enabling fair directors' cost allocation. The findings are significant to be used for reference to management accountants in construction services companies.

Corresponding Author:

Mohamad Torik Langlang Buana
Faculty of economics and Business, Universitas Mercu Buana, Jakarta, Indonesia
Jalan Meruya Selatan No.1, Jakarta Barat
Email: *m.torik@mercubuana.ac.id

Introduction

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

A construction services company, more commonly known as a contractor, is a business entity that carries out the construction of an infrastructure according to the specifications determined by the project owner. An infrastructure construction services firm constructs, maintain, or repair public or private infrastructure, such as roads, bridges, or irrigation canals [1]. Indonesia currently has around 200,000 construction service companies. They are categorized into different groups, grades, place of establishment, and other categories [2]. This large number of entities creates a population gap which provides the opportunity for the authors to analyze the construction service company segment. Construction services companies strategically take on as many projects as possible to meet their business continuity [1]. These operations needs a good practice of management accounting to be applied in the role of project cost integration [3].

An important determinant of firm success is the board of directors, who provide monitoring and important resources based on their expertise and network. At the same time, however, the board incurs substantial costs on the company, especially when the directors are replaced (e.g., severance pay, search and recruitment fee, etc.) [4]. The characteristics of the board, as well, have important implications for firms. These characteristics include the board's size, gender composition, education, and age [5]. A board whose gender is diverse may improve the firm's risk management [6], and directors demonstrating transformative leadership could positively influence the firm [7]. This condition does not reduce the general rule that strategic alignment, innovation and risk management are the drivers of organizational success [8].

Directors of construction service firms act as their representatives in their projects. They are also involved in the search, planning, execution, and delivery of projects [9]. Construction companies often have a centralized organizational structure, it needs a good strategic management and measurement system [10]. Directors incur indirect costs on the

firm. These are head office costs, which are also considered in calculating project cost estimates [11]. The allocation of these costs into each project is based on certain accounting principles [12]. In general, costs in a construction firm are divided into direct costs, indirect costs, head office costs, and project costs. These must be allocated appropriately to each project during an accounting period so as to report reasonable revenue [13]. Tang [14], in the cost-volume-profit analysis chapter of his book, groups costs into direct costs, company administration costs, and marketing costs. Adianto et. al [11] divide construction costs into four groups: project group, organization group, client and government regulation group, and environmental group. Cahyono et al. [12] analyze the revenue of a construction contract by grouping costs into eleven groups based on Financial Accounting Standard (PSAK) 34. These include costs directly related to a contract and those attributed to contract activities and others stated in the provisions.

Research Problem and Aim

Cost allocation methods can be based on, among others, a project's work hours or difficulty [15]. Other methods include profitability modeling and optimization [16] and lattice allocations [17]. However, prior research has not used construction services companies as case studies in cost allocation. Studies on construction services firms touch on cooperation efficiency (Ready & Hardjomuljadi, [18], human resources management (HRM) (Nugroho, 2019), and cost efficiency (Adiyanto et al., 2022), but not cost allocation. There thus remains a question: how does a construction services firm allocate the directors' costs for each project ?

This study is expected to contribute to a significant knowledge gap in a sector that is currently the focus of the government (i.e., construction sector). The results are expected to benefit academics, accounting professionals, and construction firms, specifically those operating in infrastructure construction. The construction sector, and infrastructure

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

construction segment in specifically, is the current focus of the government, as explained above. It is expected that this policy focus will allow the construction industry to further grow.

Method

This study employed qualitative methodology, this methodology put the researchers attached to the object of research, this method does not intend to prove any theory, unlike quantitative research [35]. The approach used is a case study approach. The case study approach is an approach that is used in interpreting the conditions or circumstances of the research object. A case study is an in-depth study of individuals, groups, organizations, activity programs, or other entities within a certain period. This approach is aimed at interpreting and describing the object under study. This method's results are constructed and holistic in nature. The qualitative case study, comprised of four phases, that is, foundation phase, pre-field phase, field phase, and reporting phase [34].

Data Collection

The research data was collected using documentation (literature on cost allocation) as the foundation of the research, or the secondary data. The field data, or primary data are collected using interviews with informants in a construction services firm to understand how they allocate general costs, especially directors' costs, to projects [36]. Prior to the interview, the informants were informed of the purpose of the study and the information collected after the interview. Permission was requested that the interview be recorded and transcribed. Transcriptions were manually encoded and analyzed to identify emerging patterns or relationships. The respondents in qualitative research should be those who understand and can explain the issue being researched [37]. The sample firm was a construction services firm in Jakarta (PT. WZK) that focuses solely on road construction works.

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Table 1. Interview Protocol

No.	Question	Objective
1.	How are general expenses classified within account groups ?	To find out the directors' costs
2.	What are the components of directors costs ?	To find out the completeness and uniqueness of cost recording
3.	How are costs allocated to each project ? Multiyear projects, short period projects, projects with special needs.	To find out the types of projects, as well as the objectives and principles or theories used in allocating directors' costs.
4.	Is there internal criticism from stakeholders regarding the director's fee allocation model ?	To find out alternative cost allocations if there is criticism from stakeholders
5.	General discussion around cost allocation.	To find more information from the perspective of the management accountant at the sample firm.

Source: Primary data, 2024

Data Analysis

Sekaran and Bougie [38] and Merriam and Tisdell [36] explain that data analysis is the process of systematically searching for and compiling data obtained from interviews, field notes and documentation. The data are organized, described, synthesized, organized into patterns, and inferred to answer the research questions. Qualitative data analysis is inductive, where a hypothesis is developed from the analysis of collected data. All data collected from the above methods have been analyzed in three phases: data reduction, data display, and data conclusion. Content analysis was used in this study to understand the contents of answers provided by the informants. Triangulation was also applied, for

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

validity testing, and the results were compared to the theory or principle of cost allocation. The informants are also expected to show the SOP of the cost allocation method.

Results and Discussion

Types of Contractors

Construction services firms in Indonesia are classified into micro, small, medium, and large based on their qualification [20] (Table 2). The number of construction services companies in Indonesia increasing, it was 159.308 unit in 2020; 203.403 in 2021; 197.030 in 2022 and 190.677 units by 2023, of which 875.57% were small, 14.3% were medium, and 0.97% were large [21]. By legal entity, only 22.85% were limited corporations *(perseroan terbatas*, PT) and 76.52% were in the form of partnership (CV). The largest firms were stated-owned (BUMN) [2].

Table 2. Construction Grade (Regulation No. 3/2017 LPJKN)

No.	Grade	Qualification	Project threshold
1	Micro	Individual	up to Rp300 million
2	Small	K1	up to Rp1 billion
		K2	up to Rp1.75 billion
		K3	up to Rp2.5 billion
3	Medium	M1	up to Rp10 billion
		M2	up to Rp50 billion
4	Large	B1	up to Rp250 billion
		B2	Unlimited
	Unqualified	Not registered with the Construction Service Development Board (LPJK) *or* expired permit	

Source: BPS.go.id, 2023

According to specialization, the firms are divided into civil/infrastructure

construction, building construction, and special construction. Infrastructure construction firms specialize in work related to the construction or maintenance of roads, bridges, and irrigation. Building construction firms specialize in houses and multistory buildings. Special construction firms are those that carry out both infrastructure and building work. Construction projects are categorized into public (e.g., schools, tolls, airports, etc.) and private [22].

Construction Services Expenses

Tang (2017) divides construction costs into three different groups: direct costs (e.g., material, labor, and equipment costs); cost of firm administration; and marketing/advertising. There are different treatments regarding the allocation of fixed costs, which include head office rental costs, interest on investments, directors' salaries, insurance, and building taxes. These treatments are discussed to show how fixed costs are allocated to every construction project.

Standard Accounting Practices - Construction Accounting

Accounting standards on construction costs, such as PSAK 34, PSAK 72 [13], IAS 11, IFRS 15 [23], which are implemented by PWC [24], explain that construction contract costs consist of: a) costs that are directly related to a particular contract. b) costs that are attributable to contract activities generally and can be allocated to the contract. c) other costs that can be specifically billed to the employer according to the contents of the contract. Costs directly related to a contract include, but are not limited to: a) field worker costs, including supervisors, b) cost of materials used in construction, c) depreciation of facilities and equipment used in the contract, d) costs of moving facilities, equipment, and materials to and from the contract implementation location, e) facility and equipment rental costs, f) design and technical assistance costs directly related to the contract, g) estimated repair costs and other costs that may arise during the warranty period, h) claims from third

parties. These costs can be reduced by incidental revenue, namely proceeds that are not part of regular income outlined in a contract. These include proceeds from the sale of surplus materials and disposal of facilities and equipment at the end of the contract.

Costs that are attributable to contract activities in general and can be allocated to specific contracts include: a) insurance, b) design and technical assistance costs not directly related to a particular contract, c) construction overhead costs. Such costs are allocated using a systematic and rational method and are applied consistently to all costs with the same characteristics. Allocation is based on a "normal" level of construction activity. Construction overhead includes preparation costs and employee payroll processing. Costs that cannot be attributed to contract activities or cannot be allocated to a contract are excluded from construction project costs. Such costs include: a) general administrative costs for which reimbursement is not specified in the contract. b) general marketing costs. c) research and development costs for which reimbursement is not specified in the contract. d) depreciation of idle facilities and equipment that are not used on a particular contract. Contract costs include costs that can be attributed to a contract from the date the contract is obtained until its completion. Additionally, costs that are directly related to a contract and incurred to obtain the contract are also included as part of contract costs if (1) these costs can be separately identified and reliably measured and (2) it is probable that the contract can be obtained. If costs incurred to obtain a contract are recognized as expenses in the period in which they occur, then these costs are not included in contract costs if the contract is obtained in the following period.

Previous Research – Construction Services Management Accounting

Previous research on management accounting in construction services has examined construction sector credit [25], also article discussed the contractors financing by Islamic banks [26] and article discussed determinants of their financing by Islamic banks [27].

Other studies discuss the construction sector from a macro perspective [28], challenges faced by the sector during the pandemic [29], and its economic challenges [30]. However, there is minimum research on cost allocation in construction service companies, even though cost allocation is a fundamental aspect of management accounting [12]. Other studies have analyzed BOD cost allocation with a contingency approach [4] and cost allocation models at engineering consulting companies [15] there was also a study regard to PSAK 72, but not for contractor, for real estate property [31]. Previous research were also performed and proposed some concepts to manage the construction project cost effectively, which means by lean the rationalizing the project cost [3], the contractors must have good internal computerized systems [10], if quality, efficiency, and profitability are a construction firm's main focus, then there is a good chance that the use of construction accounting or its integration in the construction project management and sustainable development process would be of great help [32], simultaneously, present enhancement are provided by technology [33].

ChatGPT

Nowadays, using a common simple question in one of the viral website IA era, www.chatgpt.com, you will get simultaneously a overwhelmed answers, but not always the best solutions. By typing "define the director's cost allocation for construction firm !", ChatGPT explained five common things, they are : a) Identify the Director's Costs, b) Allocation Bases, c) Methods of Cost Allocation, d) Calculating Director's Overhead Rate, e) Documentation and Review.

Field Research Object

PT. WZK is a construction services firm that focuses on road construction work, such as public roads, toll roads, and roads at airports and/or roads in mining sites. Projects are procured from the public procurement portal belonging to the Department of Public

Works and Public Housing (lpse.pu.go.id), in addition to tender invitations from toll road operators and other sources of information. The board of directors consists of three members. The main task of the board is to procure construction works as the main source of revenue for the firm. The managing director is mainly responsible for procuring new projects. One director is tasked with managing the progress of projects, and another director oversees financial matters. In accordance with the provisions of Law 40, the directors are appointed for a certain period. In the last three years, there has been a change of directors and in the overhead cost allocation method.

Road works can be categorized variously. The first category is time, such as single-year or multi-year projects. The second category is the type of work carried out, either constructing new roads or repairing and maintaining existing roads. Other projects may include specific work items. Resources such as type of material, heavy equipment capacity, number of field employees, subcontractors, and so on vary by project. This volume and variety differences in resources for each project are dissimilar to the conditions at the head office, where the figures are relatively fixed. The value of the projects carried out by the sample firm varies, although its focus is only on projects in the high value category, i.e., >Rp50 billion. Over the last three years, the firm has handled an average of eight projects, two of which are multi-year.

Qualitative Data

PT. WZK is not a public company, and as such its financial information is not disclosed to the public. The financial report does not disclose the amount of head office cost allocated to each project, as shown in the profit and loss report in Table 3. The report does not clarify which projects are profitable and otherwise. Therefore, management must further prepare sub-financial reports for each project (Table 4). Each project is led by a project leader. The quality of project leaders varies. Association regulations identify three

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

qualifications: junior expertise, intermediate expertise, and senior expertise. These classes are based on the leader's years of experience handling different projects after graduation.

Table 3. Financial Report – Profit and Loss

Year	20x3	20x2	20x1
Revenue*	xxx.xxx	xxx.xxx	xxx.xxx
Cost of Revenue	xx.xxx	xx.xxx	xx.xxx
Gross Profit	xx.xxx	xx.xxx	xx.xxx
Marketing Expenses	x.xxx	x.xxx	x.xxx
General Admin Expenses	x.xxx	x.xxx	x.xxx
Profit before Tax	xxx	xxx	xxx
Profit after Tax	xxx	xx	xx

*xxx is representing the data derived from accounting computer systems
Source: Descriptive Interviewee, 2024

Table 4. Profit and Loss Report – Individual Project, Month X, Year 20x3

	Company	Project A	Projrct B	Project C
Revenue*	xxx.xxx	xx.xxx	x.xxx	xxx
Material cost	xxx	x.xxx	x.xxx	xxx
Equipment cost	xxx	xxx	xxx	xx
Labour cost	xxx	xx	xx	xx
Subcontractors	xx		xx	
Project margin	xx	x	(x)	x

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Cost allocation BOD	xx	?	?	?
Cost allocation – general	xx	?	?	?
Profit	x	x	(xx)	(x)

*xxx is representing the data derived from accounting computer systems
Source: Descriptive Interviewee, 2024

Interview data

How are general expenses classified into account groups ?

For accounts, account numbering is included in the same account category as company operations. For example, the account code for salary is 42101 (4 = profit and loss group, 2 = cost group, 1 = employee cost group). The final two digits signify the type of employee cost, e.g., 01 for salary, 02 for overtime pay, 03 for religious holiday allowance, and so forth. The firm's accounting system also has a subcategory with a two-digit code called a profit center. Directors belong to profit center 11, whereas the finance department belongs to profit center 12. (The finance department here refers to that of the head office.) There was also a three-digit project code which may be referred to as a cost center. Each project has a unique code, starting from 001. The most recent project number was 752. These codes function as project identification numbers. For example, 750 is for a new road construction project in Manado, 751 is for road repairs in Malang, and 752 is for road maintenance projects at Lampung airport. New data cannot be added for completed projects. For example, project 600 could not be added with new data. The director's salary cannot be inputted to any project. The code is 000, similar to those in the accounting department. Similarly, salaries of head office employees involved in a project, for example the leader of project 752, are also coded as 000. This is also the case for financial staff placed under a project and who can be moved to another project (e.g., from 751 to 752).

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Table 5. Report - Trial Balance PT. WZK

Account	Profit Center	Project	Rp.
42101 Salary	11 BOD	000	xxx
	12 Admin	000 Head Office	xxx
		751 Project (Malang)	xxx
	1x others	000 other specific project	xxx
	15 Project	000 Head Office	xxx
42102 Overtime	as above	as above	xxx

Source: Descriptive Interviewee, 2024

What are the components of director's expenses ?

The informant explained about the details of accounts that are used for recording the BOD's expenses. The respondent showed the interviewer the accounting manuals. There are groups of accounts and some single accounts that are used for entering the original journals. There are different types of costs based on account grouping: Staff Expenditure Group; a) Wages, b) Overtime (driver), c) Bonus, d) Fixed allowances, e) Religious holiday allowance, f) Coverage, g) Social protection fund (BPJS), h) Income tax (PPh 21), i) Training. Those included in this profit center were three directors, one secretary, and three drivers. Depreciation Group: a) Director's car, b) Computer (laptop and software), c) General costs group, d) Head office rent allocation, e) Official travel costs (daily commute, car maintenance and the like). f) Telecommunication, g) Association membership, etc. Other cost groups include: a) Personal claim variable group, which is almost every day from the secretary. b) Marketing visit costs, recognized when claiming reimbursement. c) These two items are not allocated but included in the marketing division cost group, d) Project visit costs, which are included in project costs. Marketing visit and project visit activities usually include plane tickets, accommodation, and meals.

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

How are costs allocated to multi-year projects, short-term projects, and projects with specific requirements ?

According to the interviewees, cost allocation is reviewed every year when preparing the annual budget. This is because the allocation model has to be modified every year even when the information changes just slightly. The office cycle for government projects is typically at the start of Q2, and so during Q1 the firm focuses on completing delayed or multi-year projects, in addition to year-end evaluations. An annual planning meeting is also conducted early in the year. According to the informants, the director's costs and general costs are allocated according to theory, though they have forgotten what the theory actually is. The firm's work is not as complicated as building contractors because of its focus on road infrastructure. The most important thing is the type of work: construction, repairs, or maintenance. The raw materials are also different: some are concrete or cement and some are asphalt. If the position is the person in charge, the work must be done earlier by making an asphalt mixing plant. Other differences lie in the work tools, where some projects require new and even specific tools, such as asphalt scrapers for toll roads and roads in Jakarta. Each project team also understands the factors for heavy equipment needs. For example, some works require moving heavy equipment from one location to the main warehouse. At the start of the year, an evaluation is carried out (Table 6) and the annual budget is prepared. Some project managers are also at the headquarters to help calculate tenders. Unlike question 3, the respondents did not answer and explain as quickly as in the explanation in Table 4. They carefully stated that it is called form C. This is because the project profit and loss report is a medium between the project team and the office team, centralized between the financial and operational departments. Therefore, the cost allocation is between 3–5% of the project value. During Q1, there are usually no new projects, and so the overheads are expected to be large because the income is also small (in the Profit and Loss Report).

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Table 6. Allocation Cost Worksheet

Project type	Class
New road	10
Upgrade road	10
Preservation road	8
Maintaining road	5
Tol	8
Airport	12
Hauling	10
Project Location	
Jakarta, Bogor, Tangerang, Banten (Jabotabek)	10
Capital city, national road	9
Bush, new road	11
Owner	
PUPR	10
BUMN	9
Private	15

Source: Descriptive Interviewee, 2024

Is there any internal criticism from stakeholders regarding the targeted cost allocation model ?

Internal criticism mostly comes in the form of psychological criticism from the project team, such as the project leader and finance department, especially when the project is losing money. Even though this provision is conveyed at the annual meeting, input or information contained in the working paper is also conveyed from friends of the project leaders.

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

General discussion around cost allocation.

To validate this allocation figure, the external auditor only conducted a few interviews regarding this matter and did not include it in the audit report. It is the internal auditor who is more concerned with allocations because he must ensure the reasonableness of his directives. In some discussions, information about the uniqueness of the project is included in the tender's numerical mark-up factor.

Analysis

By comparing the common reference methods, PT. WZK has established a reliable and secure cost allocation system that benefits from well accounting software. This setup likely allows for efficient tracking and allocation of management costs, making it easier for directors to assess and attribute expenses to specific projects based on both qualitative and quantitative factors. The emphasis on confidentiality also suggests that the company prioritizes data security, ensuring sensitive information is well-protected while maintaining transparency in reporting.

The references that are used to examine the implementation are from common method of cost allocation, and also refer to PSAK which only refer to financial accounting reporting, not the management accounting. The reference is also use ChatGPT that must imply five elements, they are Identification the costs, define the allocation cases, setting methods allocation, calculating overhead rate, and documentation and review. In addition to these references, the firm has already used effective accounting systems.

The current cost allocation model of PT. WZK is fairly complete and transparent. The respondents were able to maintain the confidentiality of company data. PT. WZK also has an advanced computer accounting system, and as such it is not difficult to find the management costs for the directors in each period and relate them to project activities (in terms of both quality and quantity).

The factors that according to classical management accounting books have been

fully implemented are that the firm uses three groups of factors in making allocations, namely project difficulty, project location, and customers or owners. Even though the respondents answered the interview questions in no single particular way, their answers showed their adequate accounting educational background and their professional background. However, some information was not obtained, such as the type of machine used and the level of technical difficulty. This is understandable considering that the respondent is from the accounting and finance department. The respondent also mentioned that there is an annual review of the allocation amount. The review is carried out openly so that errors can be properly investigated.

Discussion

There are several key aspects of management accounting and how they are applied in the real management practice, which has impact on their influence on decision-making and organizational efficiency: 1) The allocation factors (project difficulty, location, and customers/owners) classical management accounting often focuses on allocating costs in a way that reflects the underlying drivers of the firm's operations. The three factors mentioned — project difficulty, project location, and customers or owners — are essential for determining how resources should be allocated or costs distributed across various projects or departments. 2) The role of accounting and finance in data collection, although the respondents have a solid background in accounting and finance, they lack detailed operational knowledge (e.g., types of machines or technical difficulty). This is common in many firms where accounting departments are distanced from day-to-day operations. The implication here is that while the firm’s accounting department can manage financial allocations based on the factors they can control, there are elements that they might overlook, which could result in incomplete or inaccurate cost allocation. 3) Annual review

of allocation amounts. The respondent mentions an annual review of the allocation process to ensure errors are detected and corrected. This shows a commitment to maintaining accuracy and transparency in the firm's cost allocation practices. Regular reviews are important for several reasons, such as error detection, adaptation to changes, transparency and open reviews that help build trust among stakeholders. 4) Organizational efficiency and decision-making, classical management accounting practices such as cost allocation based on project difficulty, location, and customer/owner factors, combined with a commitment to annual reviews and error correction, significantly influence both decision-making and organizational efficiency.

Conclusion

Based on the interview data and discussion, the research problem of how to allocate director costs in construction service companies has been answered. PT. WZK has clearly explained a reasonable mechanism for allocating director costs. The size of the general cost allocation is an internal requirement for the company, which is a source of strategic information so that the company can provide better focus on the project segment being worked on. The size of the directors' cost allocation, which in principle is the application of general cost allocation principles, is important in creating a culture of mutual ownership in the company's operations. These activities will pose challenges that must be overcome by stakeholders. This study was limited to one type of construction company. However, by comparing it with previous articles, the author shows a complete and clear picture of operational activities in construction service companies. Construction services firms focus on different types of works, including bridges, buildings, housing, water resources, and so on. Another limitation was that the sample firm was not public, so the disclosed information was incomplete, for example accompanied by figures and project values.

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Acknowledgements

The authors would like to thank everyone who has helped in completing this study; partners from the campus where the author lectures; partners in this research; and especially the respondents who have answered the questions well.

References

[1] B. M. Sukandar, N. A. Achsani, R. Sembel, and B. Sartono, "Efisiensi Perusahaan Konstruksi Di Indonesia," *Mix J. Ilm. Manaj.*, vol. 8, no. 3, p. 628, 2018, doi: 10.22441/mix.2018.v8i3.011.

[2] BPS, "Indikator Konstruksi," 2024.

[3] E. S. Aziz and F. abdullah Yaqoob, "The Role of Integration Between Lean Construction Tools in Rationalizing Construction Project Costs," *Psychol. Educ. J.*, vol. 58, no. 1, pp. 5877–5896, 2021, doi: 10.17762/pae.v58i1.1999.

[4] S. S. Wong, W. Qiang, K. Koh, and Y. H. Tong, "Does Board Turnover Enhance Firm Performance? A Contingentcy Approach," in *Academy of Management annual Meeting*, 2019, vol. 31, no. 3. doi: 10.5465/AMBPP.2019.91.

[5] B. Viola, J. Aryanto, N. C. Marsetio, and R. Yuliati, "The Impacts of Board Characteristics and Size on Risk Disclosure: Evidence from Indonesian Mining Firms," *J. Econ. Business, Account. Ventur.*, vol. 25, no. 3, pp. 255–272, 2023, doi: 10.14414/jebav.v25i3.3435.

[6] D. D. Kinasih, N. D. Nurmasari, and J. Prayogi, "Impact of Board Gender Diversity and Derivatives Use on Firm Risk," *J. Econ. Business, Account. Ventur.*, vol. 26, no. 3, pp. 283–293, 2024, doi: 10.14414/jebav.v26i3.3569.

[7] T. Yuliantini, M. Ramli, C. Kuswibowo, F. D. Malihah, and A. J. Ali, "How Transformational Leadership and Job Satisfaction Can Effect on Organizational Commitment and Increase Organizational Citizenship Behavior," *Mix J. Ilm. Manaj.*, vol. 14, no. 1, p. 124, 2024.

[8] A. F. Adi, "Strategic Financial Management : Understanding the Dynamics of Financial Strategy , Performance and Investment Decisions," *ATESTASI J. Ilm. Akunt.*, vol. 6, no. 1, pp. 420–434, 2023.

[9] I. Soerodjo, "Joint Venture as a Model of Cooperation in The Infrastructure Projects in Indonesia," *Int. J. Econ. Bus. Adm.*, vol. 8, no. 2, pp. 396–401, 2020.

[10] S. Koprivica, J. Škondrić, and M. Bendić, "Balanced Scorecard Implementation in Construction Industry," in *8th International Conference Contemporary achievements in civil engineering 22-23*, 2021, vol. 37, no. April 2021, pp. 569–578. doi: 10.14415/konferencijagfs2021.56.

[11] Y. L. D. Adianto, M. Wimala, and A. M. Harun, "Faktor-Faktor Pengaruh Besaran Estimasi Biaya Tidak Langsung Pada Penawaran Pekerjaan Jalan Oleh Kontraktor X," *J. Rekayasa Sipil*, vol. 18, no. 1, pp. 52–59, 2022.

[12] B. E. D. Cahyono, M. Halim, and R. M. Aspirandi, "Penerapan Pengakuan Pendapatan Dan Biaya Pada Perusahaan Kontruksi," *Budg. J. Business, Manag. Account.*, vol. 3, no. 2, pp. 178–195, 2022, doi: 10.31539/budgeting.v3i2.3876.

[13] IAI, "PSAK 34 Akuntansi Kontrak Konstruksi," no. 34, 2014.

[14] S. Tang, *Construction Financial Management (& Solutions)*, 3rd & 2nd ed. Hongkong: Bookboon.com, 2017.

[15] S. Wang, S. Chang, and W. Wang, "Experience-Oriented Model Of Budget Allocation And Cost Control for Engineering Consulting Projects," *Int. J. Ind. Eng.*, vol. 30, no. 2, pp. 402–420, 2023, doi: 10.23055/ijietap.2023.30.2.8421.

[16] M. Maryska and P. Doucek, "Reference Model of Cost Allocation and Profitability for Efficient Management of Corporate ICT," in *2nd Global Conference on Business, Economics, Management and Tourism*, 2015, vol. 23, no. January 2016, pp. 1009–1016. doi: 10.1016/s2212-5671(15)00324-x.

[17] K. Bent and D. Caplan, "Lattice allocations: A better way to do cost allocations," *Adv. Account.*, vol. 38, no. June, pp. 99–105, 2017, doi: 10.1016/j.adiac.2017.07.008.

[18] M. R. A. Ready and S. Hardjomuljadi, "Analisis Pembagian Tanggung Jawab Pada Proyek Kerja Sama Operasi Terhadap Subkontraktor," *J. Konstr.*, vol. 10, no. 2, pp. 1–20, 2019.

[19] R. E. Nugroho, "Pengaruh Gaya Kepemimpinan Transformasional Stress Kerja Dan Budaya Organisasi Terhadap Kinerja Karyawan Kontrak Proyek," *Mix J. Ilm. Manaj.*, vol. 9, no. 2, p. 341, 2019.

[20] BPS Indonesia, "Direktori Perusahaan Konstruksi," 2020.

[21] BPS, "Konstruksi Dalam Angka," 2023.

[22] I. D. K. Suharjana, B. Purwoko, and H. Umar, "Determinant Of Company Performance In Construction Service Industries In Java Island," *Int. J. Econ. Bus. Account. Res.*, vol. 4, no. 2, pp. 294–302, 2020.

[23] IFRS Foundation, *IRFS 15 Revenue From Contracts With Customers*, no. January 2016. 2019, pp. 481–520. doi: 10.1002/9781119579748.ch20.

[24] PricewaterhouseCoopers, "IFRS and Indonesian GAAP (PSAK) similarities and differences," 2022. [Online]. Available: pwc.com/id

[25] I. J. E. Kimbal, R. J. Kumaat, and D. Mandeij, "Kredit Bank Umum Pada Sektor Konstruksi Di Indonesia Periode 2015 : Q1-2020 : Q4," *J. Berk. Ilm. Efisiensi*, vol. 23, no. 2, pp. 85–96, 2023.

[26] M. T. L. Buana, S. Halim, and M. Muhyarsyah, "Analisa Faktor Eksternal Dan

Internal Pembiayaan Bank Syariah Pada Sektor Konstruksi," *Techno-Socio Ekon.*, vol. 16, no. 1, p. 94, 2023, doi: 10.32897/techno.2023.16.1.1715.

[27] R. Apriyanthi, R. Purbayati, and S. Setiawan, "Faktor – Faktor Yang Mempengaruhi Pembiayaan Sektor Konstruksi Pada Perbankan Syariah Di Indonesia," *ProBank J. Ekon. Dan Perbank.*, vol. 5, no. 1, pp. 25–35, 2020.

[28] A. Sonjaya, "Pengaruh Pergerakan Makroekonomi Terhadap Pembiayaan Konstruksi Perbankan Syariah," *Indones. Sos. Teknol.*, vol. 2, no. 3, pp. 335–352, 2021.

[29] E. Oey and J. Lim, "Challenges and Action Plans in Construction Sector Owing to COVID-19 Pandemic – a case in Indonesia Real Estates," *Int. J. Lean Six Sigma*, p. 2021, 2021, doi: 10.1108/IJLSS-09-2020-0149.

[30] R. Santoso and E. Permana, "Analysis of the Business Environment in Construction Service Industry in DKI Jakarta Indonesia," *Maj. Ilm. Bijak*, vol. 18, no. 2, pp. 182–195, 2021, doi: 10.52728/ijjm.v2i3.279.

[31] D. R. Rahayu, I. D. Rahmawati, and D. D. O. Rini, "The Impact Of Psak 72 Implementation On Financial Performance In The Pandemic Time Covid-19 (Empirical Study On Real Estate Companies Registered In Indonesia Stock Exchange)," *Sentralisasi*, vol. 10, no. 1, p. 12, 2021, doi: 10.33506/sl.v10i1.1157.

[32] G. Shulenbayeva, A. Jondelbayeva, A. Nurgaliyeva, A. Zhanseitov, and A. Myrzhykbayeva, "Organization of Construction accounting in the process of sustainable development," *Riv. di Stud. sulla Sostenibilita*, vol. 2022, no. 2, pp. 11–28, 2023, doi: 10.3280/RISS2022-002002.

[33] C. Sa'diyah, "Analysis Of Factors Affecting Adoption Of Financial Technology Application," *Sentralisasi*, vol. 10, no. 1, p. 57, 2021, doi: 10.33506/sl.v10i1.1208.

[34] Y. Rashid, A. Rashid, M. A. Warraich, S. S. Sabir, and A. Waseem, "Case Study Method: A Step-by-Step Guide for Business Researchers," *Int. J. Qual. Methods*, vol. 18, pp. 1–13, 2019, doi: 10.1177/1609406919862424.

[35] Hardani *et al.*, *Metode Penelitian Kualitatif & Kuantitatif*. Yogyakarta, Indonesia, 2020.

[36] S. B. Merriam and E. J. Tisdell, *Qualitative Research, A Guide to Design and Implementation*, Fourth Edi. San Francisco, USA: Jossey Bass, 2016.

[37] J. W. Creswell, *Research Design, Qualitative, Quantitative, and Mixed Methods Approaches*, Fourth Edi. California: Sage Publications, Inc, 2014.

[38] U. Sekaran and R. Bougie, *Research Methods for Business, A Skill-Building Approach*, Seventh Ed. West Sussex, UK: John Wiley & Sons Ltd, 2016.

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

BIOGRAPHIES OF AUTHORS

Mohamad Torik Langlang Buana was born in Jakarta on April 29, 1971. He obtained his Bachelor's degree in Accountancy from Universitas Mpu Tantular in 1998, and his Master's degree in Accounting Management from Universitas Trisakti in 2002 and Doctoral degree from Universiti sains Islam Malaysia in 2023. He is currently a permanent lecturer at the Universitas Mercu Buana, Jakarta . He can be contacted at email: m.torik@mercubuana.ac.id

Agus Sriyanto, was Born in 1972**,** Bachelor of Accountancy from Universitas Tujuhbelas Agustus in 1996, Magister Accountancy from Universitas Mercu Buana in 2015. He is now a lecturer in Universitas Mpu Tantular. His email : agussriyanto72@gmail.com

Tongam Sinambela, Bachelor of Accountancy from Universitas Mpu Tantular in 2007, Magister Management from Universitas Trilogi in 2016, Magister Accountancy from STEI Jakarta. Currently he is a Lecturer in Universitas Mpu Tantular. His email : tongamsinambela@gmail.com

Deden Tarmidi was born in Jakarta on September 11, 1983. He obtained his Bachelor's degree in Accountancy from Universitas Tujuh Belas Agustus in 2010, and his Master's degree in Accounting from Universitas Mercu Buana in 2014 and Doctoral degree from Universitas Trisakti in 2020. He is currently a permanent lecturer at the Universitas Mercu Buana, Jakarta . He can be contacted at email: deden.tarmidi@mercubuana.ac.id

SENTRALISASI
UNIVERSITAS MUHAMMADIYAH SORONG
https://ejournal.um-sorongac.id/index.php/sentralisasi
p-ISSN 1979-7567
e-ISSN 2614-4328

Safeza Mohd Sapian, Graduated in Bachelor in Business Administration, Norhtwood University, 1998, MBA from Universiti Teknologi Mara in 2005, and PhD from INCEIF Malaysia. Senior Lecturer in USIM and she was Dr. M Torik's supervisor for doctoral degree. Email : safeza@usim.edu.my