Transformation of the New Construction Services Development Board to Intensify the Sinergy of Community in Building the Construction Services Sector in Indonesia

Desiderius Viby Indrayana^{a*}, Iris Mahani^b, ^{a,b}Construction and Engineering Management – Faculty Civil Engineering and Environment, Institut Teknologi Bandung, West Java, Indonesia

Abstract:- The transformation of the New Construction Services Development Board (hereinafter CSDB) in 2021-2024 is believed to address the challenges of the construction service sector in Indonesia. Especially about the demands for synergy of the construction service community enhancement and their contribution to building the construction service sector of Indonesia. The new CSDB will develop fast and tactically by sticking to its duties and functions and considering all the basic assets owned by the construction service sector in Indonesia, both from internal strengths and weaknesses and external opportunities and challenges. This research was conducted using a survey method applied to the Indonesian construction service sector community as outlined in the SWOT matrix analysis and comparisons of best practices from the CSDB-level institutions in several countries around Southeast Asia, Oceania, and Europe. The analysis results are in the form of strategic steps by the CSDB to improve the community synergy in developing the construction service sector in Indonesia. The strategies are adhering to the Four Pillars of Principles: Professionalism, Accountability and Public Transparency, Law Supremacy and Research, and Development that 'PIAPPA' Indonesian Construction Service Sector (Professional, having Integrity, Advancing, and **Promoting Public Accountability).**

Keywords:- Construction Services, Sinergy, Development, SWOT.

I. INTRODUCTION

The construction industry is one of the most important industries for national development in Asia (Majumder & Biswas, 2021). In Indonesia, the construction service sector is a community activity in developing buildings that function as the infrastructure for socio-economic activities to manifest national development goals. In the last decades the Indonesian construction sector has experienced significant shift in both the size and complexity (Soemardi et al., 2020). In particular, the objective is National Strategic, namely in the form of policies stipulated by the President to increase growth and equitable development, and maintain the defense and security in improving the community welfare. This is one of the most strategic periods for the construction services sector in Indonesia, with the enactment of Law of the Republic of Indonesia No. 2 -2017 concerning Construction Services, Gov-Reg of the Republic of Indonesia No. 22 - 2020 concerning Implementation Law of the Republic of Indonesia No. 2 -2017 regarding Construction Services, as well as Regulation of the Ministry of Public Works and Housing of the Republic of Indonesia number 9 of 2020 concerning the Establishment of a Construction Service Development Board. A new era for the CSDB in Indonesia then began, formed by the Minister to carry out the Central Government's authority. The amount of labor growth in the construction sector is also quite significant at around 5-7% per year, especially in the last 5 years. Besides, the construction sector in Indonesia has grown rapidly in the last five years (Wirahadikusuhah et al., 2019).

The Construction Services Community is part of society with interests and/or activities related to construction services (Gov-Reg of the Republic of Indonesia No. 22 -2020). The central and regional governments are responsible for fostering and increasing the construction service community's participation construction in the implementation system (delivery system) as referred to in article 80 paragraph 3 (Gov-Reg of the Republic of Indonesia No. 22 - 2020), following the community developing needs. As referred to in article 97 paragraph 2 (Gov-Reg of the Republic of Indonesia No. 22 - 2020), the construction service community consists of company associations, professional associations, service users, service providers, universities/experts, supply chain actors, construction observers, construction workers, and construction service product users.

CSDB is an institution formed by the Minister to carry out part of the Central Government's authority referred to in Law of the Republic of Indonesia No. 2 - 2017 concerning Construction Services. Every step of its activities must be aligned to the Ministry of Public Works and Public Housing of the Republic of Indonesia. The CSDB as an institution formed by the Minister must be in line with the Ministry of Public Works and Public Housing of the Republic of Indonesia steps, which refer only to the vision and mission of the President and Vice President as directed by the

President of the Republic of Indonesia on October 21, 2019. However, regarding demands for sustainable development, the New CSDB must have a fundamental for moving steps. It is adhering to the Four Pillars of Principles, namely Professionalism, Accountability, and Public Transparency, Law Supremacy, as well as Research and Development towards the Construction Services Sector in Indonesia which 'PIAPPA' (Professional, Integrity, Advanced, and prioritizes Public Accountability).

II. RESPONSIBILITIES OF CSDB

The responsibilities of the CSDB are regulated and limited by the duties and functions stipulated in the Ministry of Public Works and Public Housing of the Republic of Indonesia Regulation Number 9 of 2020 concerning the Establishment of the Construction Services Development Board (CSDB). Article 7 explains that CSDB has the task of carrying out registration, accreditation, assigning expert assessors, establishing the Professional Certification Institution (PCI), granting licenses, and equating in the field of construction service. **Table 1** illustrates the number of business entities, experts, and skilled construction services sector in Indonesia as of August 21, 2020.

[Table 1]

The latest development of CSDB-level institutions in several countries in Southeast Asia, Oceania, and Europe, known as the Construction Services Development Board (CSDB), is shown in **Table 2**.

[Table 2]

III. METHODOLOGY

Over the years, SWOT analysis technique has been widely used for analyzing the internal and external environment to support an organization's strategic decision situation. It has been employed in various fields that require strategic analysis, such as in industry, organization, products, people, projects, cities, and so on (Gurel and Tat, 2017). SWOT analysis is also a tool for developing strategies by measuring the organization resources and shortages, market opportunities, and external threats to its future (Weihrich, 1982).

Correspondence Questionnaire and In-Depth Interview

The efforts to get an overview of the existence, role and function of the New CSDB were carried out through a limited survey involving 140 respondents from the construction service community in September and October 2020. Based on the educational level, the respondents consisted of Postgraduate (14%), Graduate (30%), Undergraduate (50 %), Diploma (3%), and High school (3%). Meanwhile, based on the types of work, they have included private construction employees (32%), academicians (31%), State-Owned Enterprises (BUMN) construction employees (17%), state civil servants (11%), and construction association administrators (9%). The questionnaire was directed to explore the respondents'

knowledge and understanding of the new CSDB transformation and expectations from the construction service community towards the upcoming CSDB. Figure 1a shows the construction service community's knowledge about the new CSDB management for the period 2021 - 2024, and Figure 1b shows the difference in management with previous periods based on the Ministry of Public Works and Public Housing of the Republic of Indonesia Regulation Number 9 of 2020.

Primary Data

The answers from indepth interviews and questionnaires from selected respondents are the primary data of this research. According to Sugiyono (2012), data collection techniques are the most strategic step in research, because the main purpose of the research is to obtain data.

Secondary Data

In gathering secondary data, several reviews were conducted. Literature review sourced from books and journals, both national and international. Regulatory review of several regulations that apply in Indonesia. The results of the collection and evaluation of secondary data are supporting data in determining research variables.

Interview

Because the object of research to be studied is the community and stakeholders of the Indonesian construction sector, this research will conduct research directly, by conducting questionnaires and in-depth interviews. This is intended to obtain an overview of whether or not there is a need or need for the transformation of a new construction service development agency in increasing community synergy in building the construction service sector in Indonesia.

[Figure 1]

[Figure 2]

[Figure 3]

Figure 1 shows the confidence level of the construction service community that CSDB is aligned with the Ministry of Public Works and Public Housing of the Republic of Indonesia Regulation Number 19/2020 will be able to reform Indonesia's construction industry. Indeed, this expectance must be supported by the construction service community's participation, as shown in **Figure 2 and Figure 3**.

[Figure 4]

In line with the development of Indonesia's construction industry, the CSDB has several fundamental tasks and functions. An illustration of the construction service community's expectations of the essential CSDB duties and functions is shown in **Figure 4**.

[Figure 5]

One of the CSDB tasks is to carry out the construction service business entity (CSBE) and professional certification. In the future, this task will be delegated from the Certification Unit to the Certification Board established by the Association of Business Entities and/or the Accredited Professionals Association. In this regard, the construction service community conducts an assessment, as shown in **Figure 5**.

The survey results show that there are still many construction service communities in Indonesia who do not vet understand the transformation of the new CSDB. Meanwhile, on the other hand, there is confidence that the New CSDB will increasingly have a strategic role in the Indonesian construction service community. Specifically, the role of CSDB is to be more capable of increasing community synergy in developing the construction service sector in 2021 - 2024. The results also explain that implementing equality in the construction service sector is the most crucial task (39%) of CSDB. Considering that Indonesia's construction service sector is dynamic in terms of technology, regulations, and challenges ahead, the construction service community needs a direction to better run this task. This strategy needs to be supported by analyzing the strengths, weaknesses, opportunities, and threats of Indonesia's construction service sector in the future. The results of the SWOT analysis are shown in Table 3.

IV. ANALYSIS SWOT

The survey results show that there are still many construction service communities in Indonesia who do not vet understand the transformation of the new CSDB. Meanwhile, on the other hand, there is confidence that the New CSDB will increasingly have a strategic role in the Indonesian construction service community. Specifically, the role of CSDB is to be more capable of increasing community synergy in developing the construction service sector in 2021 - 2024. The results also explain that implementing equality in the construction service sector is the most crucial task (39%) of CSDB. Considering that Indonesia's construction service sector is dynamic in terms of technology, regulations, and challenges ahead, the construction service community needs a direction to better run this task. This strategy needs to be supported by analyzing the strengths, weaknesses, opportunities, and threats of Indonesia's construction service sector in the future. The results of the SWOT analysis are shown in Table 3.

[Table 3]

V. RESULTH AND DISCUSSION

Based on the SWOT results, a mind map was carried out to cluster the potential strategies that would be recommended to the new CSDB in carrying out its functions, tasks, and challenges in increasing the synergy of the construction service community in the development of the construction service sector in Indonesia from 2021 to 2024. This recommendation remains on the Four Principles: Professionalism, Accountability, and Public Transparency, Law Supremacy, and Research and Development towards Construction Services Sector in Indonesia which PIAPPA (Professional, Integrity, Advanced, and Prioritizing Public Accountability). The recommendations of the strategic steps are described below.

- A. Strategies in Carrying Out the Duties and Functions of the CSDB which are synergistic with the nine elements of the Indonesian construction service community
- 1. Forming and disseminating descriptions of the New CSDB that emphasizes the priority of professionalism, accountability, and public transparency, prioritizing the rule of law and empowering R and D in all its activities.
- 2. Disseminating the annual activity plan related to the targets and steps of the New CSDB that can be accessed digitally by the public and the construction service community in Indonesia in particular.
- 3. Compiling and socializing the Guideline for implementing the duties and nine main functions of the CSDB transparently as well as prioritizing high professionalism values. Establishing the documents containing clear minimum obligations, governance, and accountability arrangements, as well as a planning and implementation framework of CSDB duties in the construction sector.
- 4. Initiating the publication of a portal for construction sector research journals in Indonesia that can accommodate the scientific works in the construction service sector from the experts and academies in Indonesia.
- 5. Building robust systems and organizations
- a. Initiating a synergistic coordination pattern between Business Entities associations, professions, and supply chains
- b. Inaugurating a synergistic coordination pattern with the the Ministry of Public Works and Public Housing of the Republic of Indonesia, especially the Directorate General of Construction Building
- 6. Facilitating CSDB tasks with a reliable and optimal digital online system
- a. Improving the operational system and digitization of the existing CSDB BIG DATA to produce data output that is more comprehensive, fast, and easy to understand by the public and Indonesian's construction service community in particular

- b. Digital reports are socialized and easily accessible openly through the official website of the CSDB
- 7. Implementing Good Governance in the CSDB's work environment is a leading factor that must be demonstrated to the Indonesian construction service community regarding the commitment of the New CSDB to prioritize the implementation of the Four Pillars Principles.
- B. The strategies of CSDB in providing reports and inputs to the Minister

Support for Data, Analysis, and Research Results related to periodic reports as well as opinions and input to the Minister related to the main tasks and problems faced by the Minister, especially in the fulfillment of the construction service sector targets in Indonesia as stated in the National Medium Term Development Plan (NMTDP) (2020-2024).

- a. Initiation of target study for the development and empowerment of the supply chain, especially outside Java
- Strategic plans for improvement and development of the construction's human resources in Indonesia (2021 -2024)
- c. Initiation of a study on the use of BIM and technology digitization, which is low cost and friendly for the construction service community in Indonesia
- d. Monthly performance of each ongoing and completed project along with the contractor profile, project value, and owner response (Constructor Performance Summary Report)
- e. Initiation to increase synergy with institutions, agencies, and ministries closely related to the development of the construction sector in Indonesia, especially Commission V House of Representative of Indonesia Republic.
- C. CSDB Strategy in the Long-Term Development of the Construction Services Sector in Indonesia
- 1. Initiate and be actively involved in preparing Indonesia's construction roadmap and the synchronization-harmonization of laws and regulations related to work safety, particularly in Indonesia's construction sector.
- a. Building better relationships and communication with experts and universities
- b. Initiation of activities related to research and development of construction works that fully involve the experts and university elements
- 2. Initiation of Synchronization of the Construction Work Safety and Health Regulations in Indonesia
- a. Initiation of Synchronization of the Construction Work Accident Investigation report arrangements

- b. Initiation of the preparation of the Pandemic Mitigation Risk Assessment Framework in the implementation of tasks in Indonesia
- c. Initiation to prepare the Big Data of Occupational Health and Safety Construction
- 3. Initiation of Synchronization and Harmonization the Legislation related to a balanced Legal System (Contract and Implementation) in the Construction Sector in Indonesia

VI. CONCLUSION

- 1. Many construction service communities in Indonesia do not understand the transformation of the new CSDB. Besides, the New CSDB will increasingly have a strategic role in the Indonesian construction service community. Implementing equality in construction services is the most important task of the CSDB.
- 2. Some of the proposed strategic recommendations are carrying out the duties and functions of the CSDB, which are synergizing with the nine elements of the Indonesian construction service community, providing the reports and input to the Minister, and supporting long-term development of the construction services sector in Indonesia.

Description	Total
National General Contractor Business	127.431 Business
Entity	Entity
National Specialist Contractor Business	6.124 Business
Entity	Entity
Foreign General Contractor Business	207 Business
Entity operating in Indonesia	Entity
General Business Entity (PMA)	178 Business
operating in Indonesia	Entity
Specialist Business Entity (PMA)	15 Business
operating in Indonesia	Entity
National Consultant Business Entity	9.475 Business
operating in Indonesia	Entity
Foreign Consultant Business Entity	45 Business
operating in Indonesia	Entity
Consultant Business Entity (PMA)	34 Business
operating in Indonesia	Entity
Experts	171.385 People
Skilled workers	494.229 People

 Table 1. Description of the Number of Business Entities,

 Experts, and Skills, Construction Services Sector in

 Indonesia (Source: Rivai, 2020)

Boards	Novelty
	The CIDB milestones containing annual performance achievements
Construction Industry Development Board Malaysia (CIDB, 2020)	• Annual Report containing the construction sector achievement report
	Annual Magazine
	• The website informs the achievements of the Malaysian construction sector
	Malaysian Construction Research Journal
	Guideline for registration, accreditation, and certification
	Data is publicly accessible
Building and Construction Authority Singapura (BCA, 2020)	• Annual Return, E-Survey: Selected companies submit the business and economic performance
	information to BCA
	 List of training and testing related to construction
	CWRS (Construction Workforce Registration System) is an online portal for construction
	 workforce registration Online Registration for Verification System, identity verification of construction workers
	Online system to check that a device is allowed to operate
	Data is publicly accessible
	Annual Report
Construction Industry	Blacklisted contractor reports
Authority of the	Downloadable Form related to construction activities
Philippines (CIAP,	• Reporting per 3 years for each ongoing and completed projects along with contractors, project
2020)	value, and owner satisfaction (<i>Constructor Performance Summary Report</i>)
	Data is publicly accessible
	Construction Employment Information
Australian Building and Construction Commission (ABCC, 2020)	• Annual and Quarterly reports related to targets and performance
	• Agency Multicultural Plan: Documents containing clear minimum obligations, governance, and
	accountability arrangements, as well as planning and implementation frameworks in the
	construction sector.
	Data is publicly accessible
European Construction	• FIEC Key Figure which contains summary statistical reports and the latest construction data
	related to the number of companies, total investment in construction, and work carried out each
	year
Industry Federation	Annual Report
(FIEC, 2020)	 Construction activity statistics report Live Update total investment, number of construction workers, number of companies, and
	• Live Opdate total investment, number of construction workers, number of companies, and contribution to GDP
	Data is publicly accessible
	Data is publicly accessible

Figure 1. Knowledge of the construction service community regarding the management of the New CSDB



Figure 2. The confidence level of the public towards the New CSDB









Figure 5. The importance level of CSDB roles and duties



Table 3. SWOT Analysis of Indonesian Construction Services in 2021 Strengths Weaknesses		
Strengths	w eaknesses	
(S1) It can absorb a large enough potential workforce.	(W1) Mastery of "high and digital" technology in the construction sector is mostly limited to state-owned	
(S2) It can be implemented and integrated with the online digital construction system at many stages of work.	construction companies and large national private construction companies with extensive qualifications.	
(S3) As the main driving factor for the national economy, the availability of funds for implementing construction services sector activities in Indonesia is guaranteed by the state.	(W2) The limited number of skilled experts in the construction industry.	
	(W3) High dependence on the supply chain.	
Opportunities	Threats	
(O1) Better management of CSBE, especially in adjusting to	(T1) Foreign construction workers.	
innovations in the use of information technology and data		
affecting the methods of implementing work as well as the	(T2) The availability of funds from the owner, employer, or	
efficiency and effectiveness of the construction services operation in Indonesia.	government poses a threat to the construction projects' termination.	
(O2) Sectors that are excluded in the PSBB/Large-scale Social Restriction during Covid-19 on condition that the New Normal protocol applies.	(T3) Delays in carrying out work and changes in contracts, especially in terms of costs and time.	
(O3) High demands for infrastructure development in Indonesia.		

Table 3. SWOT Analysis of Indonesian Construction Services in 2021

REFERENCES

- Majumder, Soumi and Debasish Biswas. 2021. "COVID-19 Impacts Construction Industry: Now, then and Future, DOI:10.1007/978-981-15-9682-7_13, In book: COVID-19: Prediction, Decision-Making, and its Impacts (pp.115-125)
- [2]. Wirahadikusuhah, Reini D. Adhiwira, Felix. Catri, Putra R. Gayatri, Rani, and Meifrinaldi. 2019. "Tantangan Penerapan Alokasi Anggaran Biaya SSHMS pada Kontrak Konstruksi Proyek Berisiko Tinggi" Jurnal Teoritis dan Terapan Bidang Rekayasa Sipil, Vol.26, No. 1
- [3]. Soemardi, BW, B Kusuma, and M Abduh. 2019. "Technology Assessment in Indonesian Construction Industry" IOP Conf. Series: Materials Science and Engineering 849 (2020) 012077, IOP Publishing, doi:10.1088/1757-899X/849/1/012077
- [4]. Rivai, R. (2020). Tantangan Asosiasi dalam Pengembangan Profesi Anggota di Masa Pandemi Covid-19. Webinar "Problem, Peluang, Dan Tantangan Profesi Sanitasi Dan Tata Lingkungan Dalam Era Covid-19 Dan Milenial."
- [5]. Rivai, R. (2020). Tantangan Asosiasi dalam Pengembangan Profesi Anggota di Masa Pandemi Covid-19. Webinar "Problem, Peluang, Dan Tantangan Profesi Sanitasi Dan Tata Lingkungan Dalam Era Covid-19 Dan Milenial."
- [6]. Weihrich, H. (1982). The TOWS Matrix A Tool for Situational Analysis. Long Range Planning, 15(2), 54– 66
- [7]. Sugiyono. 2012. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta (Hal.61).
- [8]. Sugiyono. 2012. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta (Hal.224).
- [9]. Sugiyono. 2012. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta (Hal.215).
- [10]. Sugiyono. 2012. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta (Hal.244).
- [11]. Sugiyono. 2015. Metodologi Penelitian dan Pengembangan. Bandung: Alfabeta.
- [12]. ABCC. (2020). Overview ABCC. Australian Building and Construction Commission. https://www.abcc.gov.au/about/who-we-are/overview
- [13]. BCA. (2020). About Building and Construction Authority (BCA). Building and Construction Authority Singapore. https://www1.bca.gov.sg/about-us/aboutbca
- [14]. CIAP. (2020). Mission Vision Construction Industry Authority of the Philippines. Construction Industry Authority of the Philippines. https://ciap.dti.gov.ph/mission-vision
- [15]. CIDB. (2020). Mision, Vision dan Objectives CIDB. CIDB Malaysia. https://www.cidb.gov.my/index.php/en/aboutus/corporate-info/mision-vision-objectives
- [16]. FIEC. (2020). Presentation FIEC. European Construction Industry Federation. http://www.fiec.eu/fiec/presentation

[17]. Gurel, E., dan Tat, M. (2017). SWOT Analysis: A Theoretical Review. The Journal of International Social Research, 10(51). https://doi.org/http://dx.doi.org/10.17719/jisr.2017.183 2