

Funding Structurization Based on Level of Importance in Formulating Indonesia National Standard

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Abstract:--- Standardization development keeps up with the sciences development. Actually, standards have become a routine parts of our life even we are not realized it. In standard development, cost of standard as an example, the cost to develop and approved standard is very little to be understood.

Indonesian National Standard (abbreviated SNI) is the only standard applied nationally in Indonesia. SNI is formulated by the Technical Committee and established by National Standardization Agency of Indonesia (BSN).

SNI formulation cost consists of some components, which is identical with the phases when formulating the SNI. In order to measure the financials importance level in SNI formulation phases, it is needed to measure the contribution of SNI formulation funding components to be compared with the BSN financial budgeting.

In order to measure the contribution of SNI formulation funding components, Analytic Hierarchy Process (AHP) method is used to get a score of phases in SNI formulation according to its level of importance in developing SNI.

SNI formulation funding structures will be proportional if finance budgeting of SNI formulation phases funding has considered the importance level of SNI formulation phases.

Index Terms ---Funding Structures, Indonesian National Standard (SNI), Level of Importance

I. INTRODUCTION

The growth of standard usage and development is simultaneously same with the sciences development. (Vermant, 1973). Actually, standards have become a routine parts of our life, even we are not realized it. In standard development, cost of standard is used to develop and approved standard and that is little to be understood (Best, Karl 2007).

Indonesian National Standard (abbreviated S.N.I.) is the only one standard that nationally applied in Indonesia. SNI is formulated by the Technical Committee and established by National Standardization Agency of Indonesia (B.S.N.).

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As a formal agency that is established by Indonesia government, B.S.N. has a vision to make S.N.I. as national standard in order to reinforce national competitiveness, improve market transparency and efficiency, and protect consumer safety, public health, and environment conservation and safety.

The role of BSN is to create SNI, because the existence of National Standardization System (SSN) is needed to support national product in order to face the free trade era, so that it can guarantee the creation of honest and fair commerce and also support national product's growth and protection of society, especially in the case of safety, security, environment function and health (SSN, 2001).

SNI formulation cost consists of some components, which is identical with the phases in formulating of SNI. The cost of SNI formulation have to be allocated correctly because it will influence BSN's financial budget planning tha made by Indonesian government as stated in BSN's Financial Statement Year 2007 as example, that budget must be arranged by considering thrift and efficiency principles, but remain to guarantee the execution of activities as specified in Plan Work Ministry of State / Institute. With correct monetary budget planning; hence, BSN can assist government in anticipating General Revenues and Expenditure Budget (APBN) deficit due to the limited source of national income (Ali, 2008).

II. FUNDING STRUCTURIZATION ACCORDING TO THE IMPORTANCE'S DEGREE

A. Funding Structurization of SNI's Formulation

Funding structure according to Balai Pustaka (1990: 860) Indonesian's dictionary that is defined as a mode about how something compiled, formed, or built. In simple perception by participant of standard activity according to Karl Best (2007), standard cost is a price paid to obtain a copy of work document, which have been perfected. From the definitions mentioned above, it can be said that standard's cost structure is costs formation, which must be paid to obtain a perfect copy of work document.

According to standard definition published by I.S.O .(International Organization for Standardization) and I.E.C. (International Electro technical Commission), standard is a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristicsfor activities or their results, aimed at the achievement of the optimum degree of order in a given context.

Indonesian National Standard is defined as documents which comprise technical rule, characteristic and guidance of activity and product, compiled and agreed by stakeholders and established by National Standardization Body that is the Body that has task to develop and legitimize standard according to law and regulation, as a national reference to form optimum regularity in certain need context. For example are specifying conditions of product and activity to guarantee protection of public interests such as product security, food security, public health, continuity of environmental function and state safety; determining quality definition and product variety, and also interoperability and compatibility between products to increase efficiency, transparency and certainty of commerce transaction; providing guidance to production management system execution and other activity for various need such as management quality system, environmental management system, and H.A.C.C.P. system (Hazard Analysis Critical Control Point) in food production; providing measurement method, technical rule and guidance for the assessment of an activity towards the standards mentioned above.

The formulation of S.N.I. is executed according to P.N.P.S. by relate the provisions in this guidance and also pay attention for the rule of P.S.N. about Technical Committee of S.N.I.'s Formulation, P.S.N. about Adoption Standard I.S.O. / IEC become Indonesian National Standard, and P.S.N. about Writing of Indonesian National Standard, P.S.N. and S.N.I. about Term, and also relevant other guidance as according to requirement.

SNI formulation cost components are identical with step in formulating SNI, for example: cost of concept compilation (drafting), cost of concept's repair, cost of technical committee / technical subcommittee consensus, cost of enquiry opinion, cost of final repair, cost of balloting / e-balloting (national consensus), cost of stipulation, and publication cost, as mentioned by Guidance of National Standardization in Development of Indonesian National Standard.

In order to calculate SNI formulation cost, we can use Activity Based Costing method (A.B.C.), because one of the paradigms in ABC method mentions that it focused at creation of customer value with cost effective process (Mulyadi, 2003). Cost effective represents a condition where the arising expense caused as consequence of value adding process as nearly as possible. Activity-based Costing system represents an information system of expense based on activity designed to motivate personnel in conducting long term cost reduction through activity management (Wirabhauana, Arya. 2007).

B. Measuring of Importance Level

Measuring importance level in SNI formulation is conducted to sort those steps start. Importance of SNI's formulation process is done by expert whose have experienced in following SNI's formulation process through spreading a questionnaire.

The determination of sample size to fill the questionnaire is based on Roscoe opinion (1975) in Uma Sekaran (1992), for example (1) sample size is among 30 to 500 element, (2) if sample is divided again into sub sample (man / woman, Elementary School / Junior High School / Senior High

School, etc.), the size of minimum sub group of sample have to be 30, (3) in multivariate research (including multivariate regression analysis), the sample size should be bigger (at least 10 times) than amount of variable to be analyzed, (4) for the simple experiment research with tight control, the sample size can be between 10 to 20 elements.

In order to measure the level of importance in each step of S.N.I. formulation, we use Analytic Hierarchy Process method (A.H.P.). It represents one of the decision making method where logic, intuition, experience, knowledge (data), emotion, and feeling factors are tried to be optimized through a systematic process. A.H.P. is a conductive flexible model, which allows decision making by combining personal values and consideration logically (Saaty, 1993). The advantage of A.H.P. is hierarchical structure, as a consequence of the selected criterion, up to the most detailed sub criterion, and estimation of validity up to inconsistency tolerance limit of every criterion and alternative chosen by the decision makers (Saaty, 1993).

The differentiation of priority and synthesis (stipulating of priority) means that determining element rating is relatively important. The determination of priority is done by calculating relative weights between variables (elements) so that we know the weight of each (importance level) element toward a criterion (local priority) or toward the target achievement (global priority). The determination of priority is conducted by using pairwise comparison method between elements at the same hierarchy level, by using scale starts from 1 up to 9 (Saaty, 1993).

C. Correlation of Importance Level and The Funding Structure

From the funding structurization of S.N.I. formulation, it will be known that the steps of S.N.I. formulation started from the lowest cost. These results are compared with the ratings of standard formulation steps obtained through A.H.P. method. From the comparison, it can be seen the relation between the importance level with the funding structure.

III. CONCLUSION

The paper can be used as basic concept to give contribution at knowledge about funding structure in formulating standard and it can be used to develop theory and become a base in hereinafter research.

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