

Development of Metrics for Research Output Commercialization at Indonesia Higher Education Institutions

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ABSTRACT

In knowledge based economics era, the role of higher education institutions (HEIs) are becoming increasingly important. Universities or polytechnics become sources of ideas, knowledge, innovation and technological advances. From HEIs new ideas can be generated into new products, processes and or required systems to boost national economic competitiveness. Hence to increase the socio-economic impact, the research outputs (ROs) of HEIs are highly important to be commercialized. This paper describes a research concerning development of metrics for RO commercialization at Indonesia's Higher Education Institutions. The research objectives are to identify features for measuring commercialization of research product for all field of science, and to describe the implications of the different fields of science on the commercialization of RO those are practically generated against the use of existing metrics. Data is collected by using a hybrid method. A qualitative method is conducted through interviews with the research institution leaders from several universities which have implemented commercialization. To complete the data, on-line questionnaire related to various elements of commercialization was developed. Currently the research defines two types of commercialization of RO, viz. direct commercialization and indirect commercialization. Accordingly two types of metrics have been developed. Metrics for direct commercialization that will be applied mostly for RO from the engineering field, and metrics for indirect commercialization which will mainly be used to measure RO from the Arts & Humanities and Social Sciences fields. Moreover several indicators commercialization have also been developed as complement to the metrics.

Keywords: direct commercialization; elements of commercialization; features for measuring commercialization; indirect commercialization; indicators commercialization.