

## Determinants of Success of University Industry Collaboration in the Science Academic Units at Makerere University

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**Abstract :** This study examined factors determining the success of University-Industry Collaboration (UIC) in the science academic units (SAUs) at Makerere University. This was prompted by concerns about weak linkages between industry and the academic units at Makerere University. The study examined institutional, relational, output, and framework factors determining the success of UIC in the science academic units at Makerere University. The study adopted a predictive cross-sectional survey design. Data was collected using a questionnaire survey from 172 academic staff from the six SAUs at Makerere University. Stratified, proportionate, and simple random sampling techniques were used to select the samples. The study used descriptive statistics and linear multiple regression analysis to analyze data. The study findings reveal a coefficient of determination (R-square) of 0.403 at a significance level of 0.000, suggesting that UIC success was 40.3% at a standardized error of estimate of 0.60188. The strength of association between Institutional factors, Relational factors, Output factors, and Framework factors, taking into consideration all interactions among the study variables, was at 64% ( $R = 0.635$ ). Institutional, Relational, Output and Framework factors accounted for 34% of the variance in the level of UIC success (adjusted  $R^2 = 0.338$ ). The remaining variance of 66% is explained by factors other than Institutional, Relational, Output, and Framework factors. The standardized coefficient statistics revealed that Relational factors ( $\beta = 0.454$ ,  $t = 5.247$ ,  $p = 0.000$ ) and Framework factors ( $\beta = 0.311$ ,  $t = 3.770$ ,  $p = 0.000$ ) are the only statistically significant determinants of the success of UIC in the SAU in Makerere University. Output factors ( $\beta = 0.082$ ,  $t = 1.096$ ,  $p = 0.275$ ) and Institutional factors ( $\beta = 0.023$ ,  $t = 0.292$ ,  $p = 0.771$ ) turned out to be statistically insignificant determinants of the success of UIC in the science academic units at Makerere University. The study concludes that Relational Factors and Framework Factors positively and significantly determine the success of UIC, but output factors and institutional factors are not statistically significant determinants of UIC in the SAUs at Makerere University. The study recommends strategies to consolidate Relational and Framework Factors to enhance UIC at Makerere University and further research on the effects of Institutional and Output factors on the success of UIC in universities.

**Keywords :** university-industry collaboration, output factors, relational factors, framework factors, institutional factors

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