ABSTRACT

It's said that the adoption of automatic/computerized equipments is a critical success factor for physical distribution industry to comply the retail industry's distribution needs, featured with the high variety, low volume, high frequency distribution. Another research question, the information technology nature of computerized automatic equipments means that the imperative need of formalized procedures in the operation for the objectives of improving data correctness and distribution performance. The above two research questions need to be tested for the theory study and business practices implication. For those two research questions, the different answer means different management implication. If the degree of distribution automation has a positive impact on distribution performance, it means that business should endeavor in the adoption of automation equipments. If the degree of distribution process formalization has a positive impact on distribution performance, it means that business should endeavor in the distribution process formalization. Another research proposition, from the view of contingent theory, does degree of automation and degree of formalization have a "fit"relationship? It means that the interaction item of degree of automation and degree of formalization have a positive impact on distribution performance. This study tests the above propositions with the samples of Taiwan's low temperature food distribution industry. By the surveys and regression tests, this research finds that the degree of distribution automation has a positive impact on distribution performance, the rigid degree of distribution process formalization has a positive impact on distribution performance, but the comprehensive degree of distribution process formalization has no impact on distribution performance. This research supports the importance of distribution automation and process formalization for improving distribution performances. It implies that distribution business should endeavor after distribution automation and distribution process formalization, and the focus is the rigidity of process formalization, not the comprehensiveness of process formalization. This research uses regression and ANOVA test the third hypothesis. Research finds that the interaction item of degree of automation and degree of formalization have no impact on distribution performance. It means that distribution enterprise should endeavor in distribution process formalization, no matter what the degree of automation the enterprise is. It's distribution process formalization that makes the potential benefits of automation equipments realized.