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Statistical Model to Find Whether Employee will Back to Office or Not at the End of WFH

Joy Kumar Roy
Nirwan University, India

I. INTRODUCTION

Nowdays different companies are asking their employees to come to office And reduce or stop working from Home. Then Question Arises How a manager will understand Whether an employee will come to office

II. SOLUTION

I have developed a model using sigmoid function of logistics regression to determine whether Probability of coming to office is 0 or 1

we have considered 10 variables which are independent of each other

age=A; experience=E, NTS=native_town_same; HA=has_ailment;;

MYK=is_mother_with_young_kids

SAP=stays_with_ailing_parents

HLH=has_litigation_inhometown;

HHL=has_high_loan

EXPM=experience_level_mid

EXPS=experience_level_senior

RT=role_technical

then $p < \text{probability employee will come to office} \geq \frac{1}{1 + e^{(-z)}}$

this is sigmoid function demonstrate logistics regression in ML statistics

assumption- all above 10 independent variable are not related with each other

where $z = 3.3382 - 0.1043A + 0.1111E + 0.1583NTS - 3.1658HA - 1.9852MYK - 1.61152SAP - 1.3185HLH$

$+ 3.5049HHL - 0.0300EXPM + .5758EXPS - 1.2013RT$;

If above 10 variable is given by hr/manager he can determine whether an employee will come to office; this is statistical modelling using logistics regression



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