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

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## 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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45.98



IMPACT FACTOR:  
7.129



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7.429



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