

A STUDY ON EMPLOYEE PERCEPTION TOWARDS BIOMETRIC ATTENDANCE SYSTEM

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Abstract : This Research is undertaken to study the employee perception towards biometric attendance system. The study helps to decrease the burden on HR department and improve the payroll system and is more accurate. For this research Questionnaire method was adopted as the survey method among the employees to know the perception of biometric method. Out of total population the sample size 132 respondents was chosen for the study. The study consists of the advantage of the biometric attendance over manual attendance. The research design is descriptive research and sampling is used for data collection. Percentage analysis Kruskal Wallis H test, chi-Square and Mann-Whitney u test for data collected through questionnaire. The findings are given based on the analysis done.

Index Terms - perception ,biometric, questionnaire.

1.I.INTRODUCTION(PERCEPTION STUDY)

Biometric attendance system is the use of technology for employee attendance. This technology is used for leave and salary system. It reduces paper work. As the HR department is responsible for salary, it is very much useful to know what time employees come and what time they go. There are less chances of bias. It is a paperless work as it is environment free as it saves stress.

Traditional methods there is lots of paperwork and maintain it is big work and finding who has taken leave it and there are chances of making changes but this biometric system there is no chances of making changes. Nowadays all the organisations even educational institutions also using this method to know the time the employees come in and go out. Even in retail industry also this plays the major role. Even in shops also they use it to know what time the employees come inside and what time they go out for break and what time they come in and do work which is very much useful for HR department for salary.

II.NEED FOR THE STUDY

- Accuracy can be maintained and security issues can be solved.
- It helps to identify the difficulties faced by the employees.

III.OBJECTIVES OF THE STUDY

- To study the influence of computerized biometric employees clocking system.
- To identify the employees behaviour towards biometric attendance system.
- To analyse the employee level of satisfaction towards biometric usage in the organization.
- To suggest measures to improve the operational performance of biometric attendance system based on the study.

IV.SCOPE OF THE STUDY

- Improve efficiency and effectiveness by automating timekeeping activities in recording of attendance.
- Improve the recognition system by learning the perception of employee.

2. REVIEW OF LITERATURE

- **Ngugi, Benjamin, Kamis, Arnold Oct-Dec 2013,**
- In this study it deals with workers who resist to use biometric system as they feel it is technology oriented. There are various theories of motivation but this study is using Protection Motivation theory for making use of biometric for motivating and appraising employees based on performance.

- **Hitesh Walia¹, Neelu Jain May-2016.** maintaining proper attendance is needed nowadays to value the customers in today's world all government and education and hospital s also using to replace traditional methods it is more secure and eco friendly This paper deals about the issues in the traditional system as well as finger print and the comparison of methods and advantages and disadvantages .
- **Smita S. Mudholkar Pradnya M. Shende Milind V. Sarode (2012)**
Inorder to distinguish from living humans to one another passwords are compared if the passwords are stolen we will be notified by biometric authentication technique. We have also discussed with regard to recognition of fingerprint which detects both the efficient usage and the abuse of the system.
- **Kavita Gupta(2017)**
Secure system is created inorder to avoid Software breach, leakage of data and data manipulation. To eliminate the issue related to security the other alternate solution found is biometric authentication technology where system cannot be hacked while validating the data and other characteristics of the user.
- **Himanshu Srivastava(2013)**
This paper discusses about the pin controls and network security used for person identification. Biometric system is a system used for convenience which represents for the user itself.
- **Ioan Buciu*, Alexandru Gacsadi(2016.)**
As today the technology is developed the attendance system is also to be updated according to latest technology .so biometric system is becoming increasingly used today And it is user friendly and it is computer based human technology
- **Abhilash Kumar Sharma¹ , Ashish Raghuwanshi² , Vijay Kumar Sharma²⁰¹⁵**
Biometric system is most popular in today's competitive world and it is used widely as it is high security system and increases efficiency and reduces paper work and important feature is image formation and image processing.

3. RESEARCH METHODOLOGY

RESEARCH DESIGN: Descriptive research is used for the study

SAMPLING DESIGN: The sample design chosen for this study is non-probability sampling and the method of sampling used is convenience sampling.

4. ANALYSIS AND INTERPRETATION

4.1 Demographic

gender	Frequency	Percentage
Male	75	57
Female	57	43
Total	132	100
Age group(in year)	Frequency	Percentage (%)
Below25	58	44
25-30	38	29
31-35	24	18
36-40	9	7
Above40	3	2
Work experience (in years)	Frequency	Percentage (%)
Below 5	55	42
5-10	34	26
11-15	23	17
16-20	8	6
Above 20	12	9
Total	132	100

Educational Qualification	Frequency	Percentage (%)
Matric	2	1
HSC	10	8
Diploma	22	17
Under graduate	62	47
Post graduate	35	27
Other	1	0
Total	132	100

4.2 TABLE SHOWING COMPARATIVE ANALYSIS OF AGE GROUP OF RESPONDENTS AND THEIR OPINION TOWARDS USEFULNESS OF BIOMETRIC ATTENDANCE SYSTEM

H₀: There is an association between the Gender and the usefulness of biometric attendance system.

H₁: There is no association between the Gender and the usefulness of biometric attendance system.

Gender * usefulness_level Cross tabulation						
			usefulness_level			Total
			Low	Moderate	High	
Gender	Male	Count	19	34	22	75
		% within Gender	25.3%	45.3%	29.3%	100.0%
		% within usefulness level	50.0%	60.7%	57.9%	56.8%
	Female	Count	19	22	16	57
		% within Gender	33.3%	38.6%	28.1%	100.0%
		% within usefulness level	50.0%	39.3%	42.1%	43.2%
Total	Count	38	56	38	132	
	% within Gender	28.8%	42.4%	28.8%	100.0%	
	% within usefulness level	100.0%	100.0%	100.0%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.084 ^a	2	.581
Likelihood Ratio	1.081	2	.583

Linear-by-Linear Association	.479	1	.489
N of Valid Cases	132		

Inferences:

Since p value(0.581) is greater than 0.05, therefore the null hypothesis is accepted at 5% level of significance and since Gender and usefulness of biometric attendance system are independent

4.3 TABLE SHOWING KRUSKAL WALLIS TEST FOR SIGNIFICANCE AMONG THE MEAN RANK OF AGE AND OUTCOMES OF BIOMETRIC ATTENDANCE

Testing of hypothesis:

H₀: There is no significance difference between the outcomes of biometric attendance system in organization

H₁: There is significance difference between the outcomes of biometric attendance system in organization

Descriptive Statistics					
	N	Mean	Std. Deviation	Minimum	Maximum
Time management	132	2.00	1.260	1	5
unbiased verification	132	2.58	1.463	1	5
Security system	132	2.35	1.425	1	5
Flexibility	132	2.29	1.233	1	5
Compactable	132	2.05	1.100	1	5
Age	132	1.95	1.051	1	5

Test Statistics ^{a,b}					
	Time management	unbiased verification	Security system	Flexibility	Compactable
Chi-Square	1.459	3.369	8.009	2.374	1.401
df	4	4	4	4	4
Asymp. Sig.	.834	.498	.091	.667	.844

Inferences :

Since p value is greater than 0.05, therefore the null hypothesis is accepted at 5% level of significance. Hence, there is no significance difference between the outcomes of biometric attendance system in organization.

4.4 TABLE SHOWING THE MANN-WHITNEY U- TEST FOR SIGNIFICANCE BETWEEN TRADITIONAL SYSTEM OF BIOMETRIC SECURITY AND THE GENDER OF THE RESPONDENTS

Testing of hypothesis:

H₀: There is no significance difference between mean rank of among traditional system of biometric security and gender of the respondents.

H₁: There is significance difference between mean rank of among traditional system of biometric security and gender of the respondents.

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
traditional total	Male	75	69.71	5228.50
	Female	57	62.27	3549.50
	Total	132		
Test Statistics				
		traditional total		
Mann-Whitney U		1896.500		
Wilcoxon W		3549.500		
Z		-1.116		
Asymp. Sig. (2-tailed)		.264		
Note: No (*) denotes accept null hypothesis 5% significance level.				

Inferences Since p value (.264) is greater than 0.05, therefore the null hypothesis is accepted at 5% level of significance. Hence, there is no significance difference between mean rank of among traditional system of biometric security and gender of the respondents.

IV. RESULTS AND DISCUSSION

4.1 Results of Descriptive Statics of Study Variables

Table 4.1: Descriptive Statics

Summary of findings:

- Half of the respondents (57%) belong to the male category .and majority of the respondents' age is below 25 years and ' (42%) of the respondent has work experience below 25 years and , majority of the respondents (47%) were under graduated.
- Majority of the respondents' (76%) opinion towards the biometric has enabled successful organization change and most of the respondents' (74%) opinion towards the training is provided for the biometric attendance system. Majority of the respondents' (73%) opinion towards the preventive maintenance related to biometric attendance system executed properly and , most of the respondents (44%) feel respondents the time and attendance and the least of the respondents (5%) feel the others biometric security has been installed in the organization.
- It is inferred that, majority of the respondents' (73%) opinion towards the use of biological data for personal identification eliminates problems and , majority of the respondents (45%) feel satisfied with the biometric attendance system.

SUGGESTION:

- More biometric machines should be implemented for the convenience of the workers.
- In case of power failure battery backup should be available. Since, it can be reduces the delay in attendance. Proper training should be provided regarding the LMS portal and testing should be done periodically. Overtime worked should be taken into consideration which can be help to motivate employees. When one Swipe is done it should be updated in LMS portal immediately, so that confirmation is done. Finger print recognition may use some issues, so other recognition should be implemented.

V. Conclusion:

This study is based on the implementation of biometric attendance system . The usage of biometric attendance system over manual attendance can improve the accuracy and security of the employee attendance and also case to use. The

LMS portal adapted is useful to the organization to manipulate the accuracy of the employee attendance in the payroll process. Biometric attendance system helpful is recognition overtime worked by the employees. Employees feel ease to apply for all leave and out duty through LMS portal. These factors can satisfy employees and based on their attendance process. The employees are satisfied by this system as the time they come in and out are entered and useful for HR department for calculating salary as all government and non-government organization are increasingly using this method as reduces paper work and maintaining is done easy as accurate recording is done in this system .It also increases the efficiency of the organization as it is based on clock time .

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