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Impact of Electricity Shortages on Employee Performance: A Case Study of Banks in Attock City

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ABSTRACT

This research study looks into the impact of electricity shortage (8-18 hours) on the level of employee performance of bank in Attock city. Total 113 respondents responded to the adopted questionnaires of Electricity shortage and employees performance for which the Cronbach's Alpha was calculated to confirm its reliability, which resulted in the score of 0.703, 0.709. The major findings of the study and evaluation have been done by using Statistical Package for Social Sciences (SPSS). The findings show that long hours load shedding decreases the employee performance due to pending tasks and customers crowd. And as the load shedding increases the employee performance decreases. The more the alternate sources of electricity are the more is employee productivity in banks and the more satisfied are the employee. The study was supported by the findings of the previous researches conducted by different researchers.

KEYWORDS: Electricity shortage, employee performance, unscheduled load shedding.

1. INTRODUCTION

Electricity, a unique resource has the potential to make organizations sustainable. It has become important part of our daily lives and without its availability it seems to be "stone age". Miraculous effects of electricity lead human beings to robotic and automated life. Most importantly, it has saved human effort and wastage of time [1]. Currently, due to ease provided by electricity its demand is increasing day by day. The increase in electricity demand around the world may be because of population growth or to increase standard of living. World population is increasing twice about every thirty-five years [2]. The developed countries have become dependent on electricity for its life style, its security and its prosperity [3]. However, the increase in demand for electricity and dependency of countries to fulfill energy demands may be the biggest problem in coming years [4].

Pakistan also faces energy shortage since 1965 and this supply-demand gap in electricity increases day by day with increase in population and standard of living [5]. Pakistan still has scarce energy resources, where most of the population may not have access to energy services like electricity [6]. Electricity shortage may have serious impact especially for the electronic banking system in Pakistan. To cope with the electricity shortage and for smooth operations, bank makes alternative arrangements. However, existing alternate energy sources may not be enough to cope with electricity shortfall. Hence, banks may face various problems in electronic banking transactions. However the issue of electricity shortage may be a hurdle to the use of all automated processes, employee performance and customer satisfaction.

Electricity shortage may also lead to mismanagement in bank processes due to more customer density despite the provision of alternate sources like uninterruptable power supply (UPS), Generators etc. These alternative sources may not work in Peak load shedding hours. Alternative sources may also have capacity problem due to unscheduled 20-22 hours load shedding. However; the above issues may have impact on employee performance due to improper working climate mainly due to load shedding. These issues may further lead to client dissatisfaction.

2. LITERATURE REVIEW

Globally the requirement for energy is constantly rising. The use of energy round the world is doubling every fourteen years [2]. South Asia has grasped much importance to the world energy markets due to its increased energy demands. On the primary level the demand for energy has rose to 64% between 1992-2002 in South Asia [7]. Pakistan is also facing its worst electricity shortage especially during the month of May to September. Currently the power cuts in the form of 8-18 hours load shedding have destroyed the economic output [7]. These power cuts may have severe effects in automated businesses.

Currently Pakistan is progressing in the way of development stages and most of the businesses are automated. This is mainly done to improve quality of products and services. This has improved standard of living of people. But on the other side the population is growing day by day. This has influence demand supply

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equilibrium of Pakistan. However, in the way of development and more use of automated processes the demand for electricity has mainly increased. The demand supply gap of electricity may have main influence on economic growth of Pakistan [8].

However, despite the issue of electricity shortage; automation has become the key for success in every organization. Investment in IT infrastructure may be considered a vital feature of progress in current competitive setting [9]. A very useful and valuable asset of an organization is its employees. Employees could be more valuable if they engage in right job at right time. Number of factor are analyzed that greatly affect employees performance but customer satisfaction is a very important factor [10]. These two factors Employee performance and satisfaction; and customer satisfaction and employee performance are interlinked and have effect on each other [11].

Employee performance is widely affected by its environment. The better workplace environment produces the better results. Employee faces both mental and physical stress during job. It is the prime responsibility of the policy makers to set the organizational environment in a manner that promotes employees performance and satisfaction [12].Employee performance may be a core factor for the success of an organization in the competitive business world. There are many factors that affect the employees' performance like motivation, empowerment, attitudes and behavior, level of involvement, climate of the organization and many more [10].

It is observed that employees may become depressed due to long hours load shedding, pending work and crowded environment due to waiting clients. Employees may not be able to work properly and their performance may decline in such circumstances. Fear of lay off and loss of job due to less productivity may lead to more dissatisfaction of employees [11]. The following hypotheses are developed on the basis of literature review;

H_1: Electricity shortage has impact on employee's satisfaction.

H_2: Electricity shortage has impact on employee's productivity.

3. METHODOLOGY

3.1. Sample.

Sample consisted of 113 bank employees. Adopted questionnaire helped in gathering responses. A simple random sampling technique was used for selecting sample form banks of Attock city. Maximum responses were tried to capture.

3.2. Data collection.

The data collection for the current study was taken from well adopted questionnaire. The instrument for electricity shortage was adopted from the research work of Kallas et. al. (1991). The same way instrument of employee performance was adopted from the research work of Wangenheim et. al. (2007). The questionnaire was having 10 items related to electricity shortage and employee performance on Likert type scale having 1= strongly disagree, 2= disagree, 3=not sure, 4= agree, 5=strongly agree.

3.3. Procedure.

The responses from employees were collected by means of adopted questionnaire as discussed earlier. The questionnaires were distributed personally and the responses were collected. All the data was put into and processed through SPSS. Regression analysis was used in the research study. Electricity shortage was taken as independent variable while employee performance was taken as dependent variable.

4. RESULTS AND DISCUSSION

Cronbach Alpha for the questionnaire of electricity shortage and employee performance is given in the Table 5.1. It was 0.703 for electricity shortage and 0.719 for employee performance; which is an ideal figure. Alpha in this case is greater than 0.7, thus the scale can be considered reliable.

Table 5.1

Reliability Statistics		
	Cronbach's Alpha	No. of Items
Electricity Shortage	.703	10
Employee Performance	.719	10

Regression analysis helped in establishing the dependency of the variables. The results presented in table 5.2 indicate that if electricity shortage is increased by by 1 unit, employee satisfaction will decrease by 2.923 units. Value of R^2 is 0.553 which shows that about more than half the variation in electricity shortage is explained by the model. Also R^2 value (0.553) shows that electricity shortage explains 55.3% of the variability in employee satisfaction.

Standard error of estimates is considerably lower, about 0.000. Thus the first hypothesis is accepted. And the results show that electricity shortage has impact on employee satisfaction.

Table 5.2

Model	R Square	Unstandardized Coefficients		Sig.	Hypothesis 1
		B	Std. Error		Accepted
(Constant)	.553	19.56	.089	.000	
Electricity Shortage		-2.923	.089	.000	
Dependent Variable: Employees' satisfaction					

The results of the Table 5.3 indicate that if we increase electricity shortage by 1 unit, employee satisfaction will decrease by 0.6981 units. Value of R^2 is 0.686 which shows that about more than half the variation in electricity shortage is explained by the model. Also R^2 value (0.686) shows that electricity shortage explains 68.6% of the variability in employee satisfaction. Standard error of estimates is considerably lower, about 0.000. Thus the second hypothesis is also accepted. And the results illustrate that electricity shortage has impact on employee productivity.

Table 5.3

Model	R Square	Unstandardized Coefficients		Sig.	Hypothesis 2
		B	Std. Error		Accepted
(Constant)	.686	17.276	.079	.000	
Electricity Shortage		-6.981	.079	.000	
Dependent Variable: Employees' productivity					

5. CONCLUSIONS

The conclusions from the results of the current study are that electricity shortage has a significant effect on employee performance. It has also significant impact on employee productivity. The more better the workplace environment; the better are the results. Private sector banks are more equipped with alternate electricity sources and provide more comfortable environment to their employees as compared to Public sector banks.

6. Future research.

Firstly; only banks of Attock city are considered in this research study because being female it was difficult to approach all the banks of different areas. However, the study could be expanded to banks of all big cities or from all over Pakistan.

Secondly; sample are taken from banking sector only in this research study. However; the study could be extended to education, medicine and even industrial sector as well.

Thirdly; during data collection process it was observed much difficulty in taking accurate responses due to unscheduled load shedding. Respondents were not providing responses due to the suffocation and heat of June and July. Thus it was a big issue. Thus whenever data be collected in future research studies time matters a lot.

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