

Workplace Competence Assessment and Development of Frontline Managers at Indian Power Companies

Ruchi Tyagi and Suresh Vishwakarma

Abstract² The paper identifies training needs for work place competence of front line managers at Indian power distribution companies (DISCOMs). DISCOMs' top managers were interviewed to develop questionnaire items. The findings include that frontline managers need training on few new technologies and commercial areas related to customer services.

Index Terms² Electricity customers, frontline managers, power distribution companies, training.

80% of the revenue. Frontline managers heading DISCOMs' field offices are the key persons who practice most of the technologies and approaches to benefit customers of different categories. Thus we took following as the business problem to present research - the inadequate competency of frontline managers at Indian power distribution companies in new technologies and commercial practices are resulting in F X V W R P H U V \ G L V V D W L V I D F W L R Q Research problem The study would enquire the F R P S H W H Q F \ Q H H G V R I managers of I U R C technical and commercial items for training need assessment.

I. INTRODUCTION

The Indian power distribution sector has been witnessing a lot of activities like increased consumer demand, increased urbanization, rural electrification, and increased private sector participation in the recent years. The changing scenario is now anticipating strengthening of sales capabilities, total service capabilities, increased management efficiency and responsiveness, rationalizing and increasing the speed and efficiency of operations as well as strengthening internal auditing functions to reduce losses [1]. 6 & 20 V \ P D Q S P Z H U is not trained in the new technologies and practices resulting in performance deficiency and reduced customer satisfaction demanding regular update Q J R I H P S O R \ H H V \ Y N L O O V is important to find which competences are resulting in performance deficiency and reduced customer satisfaction the present study focus on same. Most of the training programs whether run in-house or conducted externally are attended only by those who can be spared to attend such training programs [3]. CEA [4] has stated that power sector reforms have led to change in the role of engineers from a purely government controlled technical management to business management in a corporatized framework. National Training Policy of India [5] states that training of staff at state HO H F W U L F L W \ E R D U G Z D V R I W H Q C manpower is not trained in the new technologies and practices resulting in performance deficiency and reduced customer V D W L V I D F W L R Q G H P D Q G L Q J U H J X O \ D U X S G D W L Q J R b H P S O R \ H H V \ V N L O O V [6]. : R U O G % D Q N \ V says that unstructured Accelerated Power Development and Reforms Programme (R-APDRP) initiatives can be successful only if the capacity of the utility staff is improved through appropriate skills and requisite training. Also, the distribution utilities need to focus on enhancing customer satisfaction by providing efficient and reliable service in India where 20% of customers account for

II. LITERATURE REVIEW

Power Sector Reforms in India were identified as the key area to bring about the efficiency and improve financial health of the sector [8]. The Electricity Act of 2003 has paved the way for greater private sector participation into a hitherto public sector dominated space. The new areas of expertise emerged upon reforms and the consequent training requirements of the staff of power distribution companies especially at the frontline level has received some attention in new reports, journals, newspaper articles, training policies, satisfaction is increasingly important to retail electric utilities. Satisfying customers was important during the old days of utility regulation, when utility customers had little if any important today, when customers can invest in equipment to bypass the grid in whole or in part, and it will inevitably be more pronounced in the future, when distributed generation options become more widespread and affordable [9]. Some of the thrust areas of the research conducted earlier to explore training needs assessment are illustrated briefly in Table

TABLE I: STUDIES UNDERTAKEN ON COMPETENCIES FOR CUSTOMER SERVICE IN INDIAN POWER DISTRIBUTION SECTOR

Sl. No.	Author	Year	Dimensions
1	Kushwah and Bhargava [10]	2014	8 Q G H U V W D Q G L Q J F X V W R P H and expectations.
2	Ramachandra and Biloli kar [11]	2014	& X V W R P H U V \ J U L H Y D Q F H V redressal
3	Masoud [12]	2013	DISCOM-customer relations
4	Mishra [13]	2008	Educating customers on the installation safety, efficient usage, and beneficial schemes
5	Zeithamlet al [14]	2006	DISCOM-customer relationship
6	Smith and Woods [15]	2004	Educating customers on energy efficiency
7	Purcellet al. [16]	2003	Quality customer services by staff

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III. METHODOLOGY AND DATA ANALYSIS

TABLE II: DEMOGRAPHIC PROFILE OF CUSTOMERS

Variable	Category	N=500	Percent
Category of consumption	Domestic	332	66.4
	Commercial	98	19.6
	Industrial	25	5
	Agriculture	28	5.6
	Others	17	3.4
Age of Respondent	20 ±30	106	21.2
	31 ±40	149	29.8
	41 ±50	130	26
	Above 51	115	23
Gender of respondent	Male	459	91.8
	Female	41	8.2
Educational qualification	Below Graduate	57	11.4
	Graduate	272	54.4
	Master and above	171	34.2

customers was in millions, 500 customers were selected for the study. 500 is the suggested sample size when the population is infinite (published tables). The study focused on central India. Table II represents the demographic profile of customers under study.

7 H V W L Q J R I K \ S R W K H r e m e n t a b o u t t h e V W R P frontline managers was initially undertaken assuming null and alternate hypothesis. An assumed mean value of 4 (Agree) was considered for the responses to test the null hypothesis using Two-Tail test.

$$H_0: \mu = 4$$

$$H_1: \mu < 4$$

IV. UNITS

The results in Table III were analyzed using SPSS software to the responses collected from customers at 95% significance level.

Sampling: The population included electricity customers of different categories. Since the population of electricity

TABLE III: ONE SAMPLE STATISTICS (ASSUMED TEST VALUE =4)

Statement	Mean	SD	t	Sig. 2-tailed
C1 Your monthly consumption changed in last years	4.17	0.8	4.460	0.000
C2 Your expectations for DISCOM services changed in last few years.	3.93	0.9	-1.59	0.112
C3 FLMs at DISCOMs understand your needs/expectations.	2.97	1.1	-19.4	.000
C4 FLMs adequately advise on electrical installation and its shortcomings.	2.65	1.2	-24.4	.000
C5 FLMs adequately educate on the installation related safety issues	2.68	1.2	-23.6	.000
C6 FLMs adequately advise on installation energy efficiency measure	2.72	1.2	-22.6	.000
C7 FLMs adequately advise and educate you on slabs of electricity tariffs	2.92	1.3	-18.0	.000
C8 FLMs adequately advise and educate you on the responsibilities of electricity customers.	2.72	1.3	-21.7	.000
C9 FLMs adequately advise and educate you on the penalties for indulging in electricity theft.	2.89	1.4	-17.7	.000
C10 FLMs adequately educate you on the disadvantages of having low power factor in installation	2.69	1.3	-22.0	.000
C11 FLMs adequately educate you on the disadvantages of having unbalanced load in your installation	2.73	1.4	-19.7	.000
C12 FLMs adequately educate you on the benefits of using energy efficient appliance your installation.	2.62	1.3	-22.6	.000
C13 FLMs educate you on Bureau of Energy Efficiency (BEE) star schemes to help customers.	2.66	1.4	-21.3	.000
C14 FLMs adequately advise and educate you on the common electricity problems.	2.99	1.2	-18.5	.000
C15 FLMs are commercial in their approach as they are technicians	3.18	1.1	-16.2	.000
C16 FLMs are capable of positively influencing you as DISCOM customer	2.87	1.4	-17.3	.000
C17 FLMs have unbiased approach towards you as DISCOM customer	2.79	1.2	-21.0	.000
C18 FLMs track your pending grievances and follow-up enough to address.	2.73	1.3	-20.8	.000
C19 FLMs put enough efforts to reduce supply outage	2.92	.96	-25.0	.000
C20 FLMs put enough efforts to reduce supply outage	3.23	1.0	-16.0	.000
C21 FLMs put enough efforts to reduce supply outage	3.37	.90	-15.4	.000
C22 Good communication and public relations are mandatory for FLM.	3.86	1.3	-2.31	.121
C23 FLMs are cost conscious enough in their work and customer services	2.97	1.2	-18.5	.000
C24 FLMs promptly resolve your grievances related to bill and services.	3.16	1.2	-15.1	.000
C25 FLMs show trust and empathy in listening facts and realize feelings	3.04	1.2	-17.2	.000
C26 FLMs are motivated and professional	3.19	1.0	-17.6	.000
C27 FLMs provide information as much as possible from available info	3.08	1.3	-15.5	.000
C28 FLMs are capable to develop collaborative relations between DISCOM and customer	3.10	1.0	-19.2	.000
C29 FLMs are capable to develop collaborative relations between DISCOM and customer	3.14	.98	-19.4	.000
C30 FLMs build DISCOM image as customer friendly	3.09	1.1	-17.0	.000
C31 FLMs are sensitive in dealing and refrain from any unpleasing behavior	2.78	1.3	-20.8	.000
C32 FLMs at work demonstrate team spirit and fellowship	3.18	1.0	-16.6	.000

\$ SRVLWLYH FRUUDWLRQ FRQF... Expectations have also changed along with the range in their

electricity consumption during the past years.

TABLE IV: CORRELATION BETWEEN CHANGE IN CONSUMPTION AND EXPECTATIONS

Channels	Consumption has changed	Expectations have changed
Consumption change		
Expectations have changed	.552**	
Mean (n=500)	4.17	3.93
SD	0.852	0.983

Table III confirmed that the significant value for all 32 variables is less than 0.05 except for the variables -Expectations for services from the DISCOM have changed and Good communication and public relations skills are PDQGDWRU\ WR SHUIRUP)/OV MRE to serve you better. 7KH DFWXDO mean values are not equal to or greater than the assumed mean value of 4 except for increase in electricity consumption, which confirms that all the customers do not agree to the statements. Hence the null hypothesis is rejected and alternative hypothesis was accepted.

The mean values below 3 indicated that the customers do not agree to under-listed 18 skills. Frontline managers need to be trained adequately in these skills.

TABLE V: MEAN VALUES ON SKILLS

Sr.	Mean
C3	2.97
C4	2.65
C5	2.68
C6	2.72
C7	2.92
C8	2.72
C9	2.89
C10	2.69
C11	2.73
C12	2.62
C13	2.66
C14	2.99
C16	2.87
C17	2.79
C18	2.73
C19	2.92
C23	2.97
C31	2.78

Table III and 19 V X J J H V W R X N O B I E V E U A T V FLMs properly understand their needs as well as do not advise WKHP DGHTXDWHO\ 7KH\ GRQ W H G X P D W W X G H P L H W K M D O R Q E O H U J R L efficiency, efficient installation, and safety related issues.

Further, customers perceive mandatory good communication and public relations skills most important (mean value 3.86) WR SHUIRUP IURQWOLQH PDQDJHUV IURQWOLQH PDQDJHUV

Customers have perceived the under-noted attributes with means (above 3) as crucial.

- 1) FLMs are equally commercial in their approach as they are technical at work.
- 2) FLMs are putting enough efforts to reduce supply outage in their area.
- 3) FLMs DUH SXWWLQJ HQRXJK HIIRUUAUWNR QREXWV revenue.
- 4) FLMs possess enough skills to promptly resolve your

services and bills related grievances.

- 5) FLMs demonstrate trust and empathy in listening to your facts and understand feelings.
- 6) FLMs are adequately motivated and professional to make DISCOM progress and serve you better.
- 7) FLMs are capable of providing information as much as possible from info available
- 8) FLMs are capable to develop collaborative relations between DISCOM & customers for win-win situation.
- 9) FLMs are thorough and precise in approaching ' , 6 & 2 0 ¶ V Z R U e n p r o s o c i a l a c t i v i t i e s .
- 10) FLMs try to build DISCOM a customer friendly company with good image in general public.
- 11) FLMs have team spirit and fellowship at their workplace to serve you better. 7KH DFWXDO mean values are not equal to or greater than the assumed mean value of 4 except for increase in electricity consumption, which confirms that all the customers do not agree to the statements. Hence the null hypothesis is rejected and alternative hypothesis was accepted.

Also the lowest SD 0.905 shows that customers are comprehensible on the issue ' , 6 & 2 0 V ¶ I U R Q W O P D Q D J H U V D U H S X W W L Q J H Q R X J K H I I R U H Y H Q X H ' + L J K V W D Q G D U G G H Y L D W L F X V W R P H U V D U H V R P H Z K D W G X E L R X V under-noted attributes

- 1) FLMs adequately advise and educate you on the penalties for indulging in theft of electricity.
- 2) FLMs adequately educate you on the disadvantages of having unbalanced load in your installation.
- 3) FLMs educate you on the role of Bureau of Energy (I I L F L H Q F \ D Q G R W K H U * R Y H U Q P H Q W
- 4) FLMs are capable of positively influencing you to be a loyal and responsible customer of DISCOM.

Reliability and Validity of the instrument Each item of the questionnaire was to be rated on five-point scale ranging on the continuum of Strongly Disagree to Strongly Agree. The reliability of the test ranged between 0.7 and 0.9, and its construct validity (content and criterion) was established. & U R Q E D F K ¶ V \$ O S K D Y D O X H R I consistency.

V. CONCLUSION

management as well as contributes to academics by giving supporting information on the impact of different variables to further the research on understanding what additional variables may also exist and how they can be remedied. 6 & 2 0 V ¶ P D Q D J H P H Q W P D \ X V H W K H V H develop a suitable scenario in order to foster the performance of their frontline managers. This study paves way to further this research in a larger geographical region to develop better understanding on the training needs of frontline managers in power distribution companies in all those developing countries where reforms have been lately introduced. The results may vary across social schemas and cultures. Future research should explore these issues.

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