

Performance of Akshaya Centres0n the Basis of the Availability of Infrastructure in Thiruvananthapuram District

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Abstract- Even though e-governance services can avail through a common portal, people approach Akshaya centres for e-governance transactions and other services. Hence the services offered through Akshaya centres are increasing day by day. As e-governance transactions and other services are increasing day by day, an assessment of the Akshaya centres should be carried out on the basis of the facilities available including infrastructure facilities, service provided, number of transactions, monthly income etc. Here in the article infrastructure includes only the hardware available in the Akshaya Centres. The article is highlighted the assessment of Akshaya centres made on the basis of number of transactions show that there is significance difference in the number of transactions carried out in locality wise, age wise and number of workers. But there is no significant difference with respect to gender and educational qualification. The hardware wise analysis revealed that the Akshaya centres with more hardware have large number of total transactions, e-governance transactions and other transactions. Hence it is an attempt to analyse the performance of Akshaya centres on the basis of the availability of hardware, number of transactions and monthly income.

Keywords: E-governance ,Infrastructure, Skilled manpower

I. INTRODUCTION

It is desirableto make an assessment of the performance of Akshaya centers and e-governance. Even though e-governance services can avail through a common portal, people approach Akshaya centers for e-governance transactions and other services. Hence the services offered through Akshaya centers are increasing day by day.A primary survey was conducted among 157 Akshaya centers in Thiruvanathapuramdistrict. Analysis in this chapter is divided into two sections. Section I analyses the socio- demographic profile of the sample Akshaya entrepreneurs with respect to structural stratifiers such as area, age, gender and education. Section II makes an assessment of Akshaya centres in terms of infrastructure facilities, services provided, number of working days, average number of transactions and monthly income.

SECTION I

1.1: Socio -Demographic Profile of the Entrepreneurs

A Statistical summary of the socio-demographic profile of the Akshaya entrepreneurs with respect to structural stratifiers such as area, age, gender and education is presented in Table 1.1.

Characteristics			%
Area	Urban	34	21.70
	Rural	123	78.30
Gender	Male	86	54.78

Table 1.1: Socio-Demographic Position of the Sample Akshaya Entrepreneurs

Irce: Primary Survey	157	100.00	
Total			
	Professional Degree	15	9.55
	Post Graduate	34	21.66
Education	Degree	83	52.87
	Plus Two	25	15.92
	45 and Above	51	32.48
Age	40-44	65	41.40
	Below 40	41	26.11
	Female	71	45.22

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From the table it is seen 78.30 percent of the Akshaya centers are situated in rural area and the remaining are in urban area. This is also shown in the figure 1.1

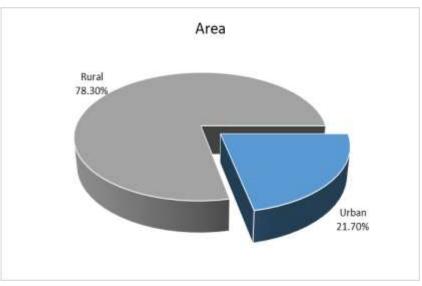
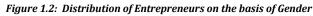
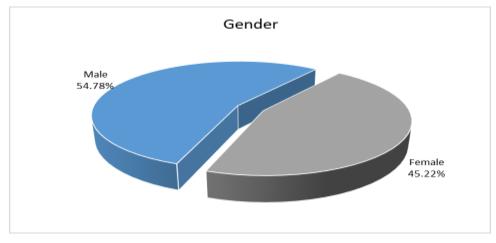


Figure 1.1: Distribution of Entrepreneurs on the basis of Area

Source: Table 1.1

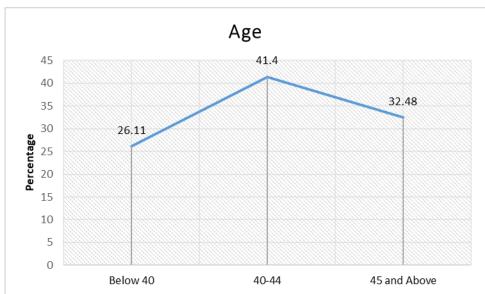
Entrepreneurs by gender classification showthat male entrepreneurs are higher than that of female entrepreneurs.Out of 157 respondents, 86 are males (55percent) and the remaining 71 are female entrepreneurs (45 percent).





Source: Table 1.1

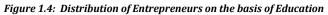
The distribution of entrepreneurs across various age categories reveal that 26percent age of entrepreneurs belongs to the category of below 40 years and 41per cent are between the age of 40-44 and the remaining 32 percent of entrepreneurs are above 45 years of age. Majority of the entrepreneurs falls under the category of 40-44.

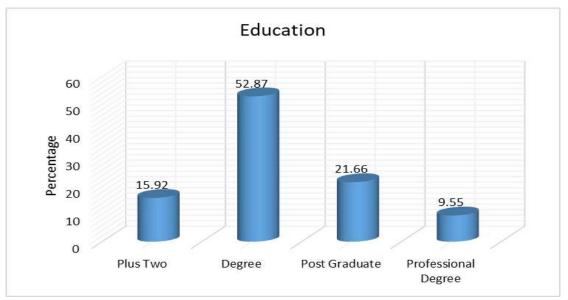




Educational level of the entrepreneur may substantially influence the entrepreneurial skills which would enable them to explore new opportunities and develop ability to capture innovations in technology. Unlike managerial skills, the entrepreneurs need to acquire technological skills too in Akshaya centers. Distribution of entrepreneurs across different educational level shows that around 16 percent of the entrepreneurs have only plus two qualifications. But75 percenthave graduation or post-graduation. However, 10 percent of the entrepreneurs have professional qualification like MCA, B.Tech, and LLB etc. Most of them reported that they have the basic computer knowledge and possess diploma in computer application. This is also depicted in the figure 1.4.

Source: Table 1.1





Source: Table 1.1

SECTION II

1.2 Assessment of Akshaya Centres

As e-governance transactions and other services are increasing day by day, an assessment of the Akshayacenters should be carried out on the basis of the facilities available including infrastructure facilities, service provided, number of transactions, monthly income etc. In the present study a detailed discussion about the following aspects of Akshaya centers were made.

a) Infrastructure Facilities

The infrastructure in the present study consists of the hardware available in Akshaya centers. Table 1.2 shows the distribution of Akshaya Centers by number of various equipments owned at present. From the table it seen that there are 17 per cent of the entrepreneurs own 1-3 computersand65 percent of the entrepreneurs possess 3-6 computers. While only 18 percent of the centers have more than 6 computers.

Now all transactions and other services require Aadhar identification, Aadhar machines has become an important instrument to be kept in the Akshaya centres. With regard Aadhar machine when58 percent of the centers own Aadhar machine 42 percent do not have any Aadhar machine. Aadhar machine at present costs Rs1.5 lakhs which is not affordable by many entrepreneurs.

Considering the number of printing machine 67 percent of the entrepreneurs have printers in between 1-3 and only 33percent have printers in between 3-6. Likewise, when66percent have scanners in between 1 to 3 numbers,34 percent own more than 3 scanners. A major proportion of Akshaya centres also hold web cams and photocopier machines (See Table 1.2).

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Item	Frequency	No. of Centres	%
	1-3	27	17.2
Computer	3-6	102	64.97
	6-9	28	17.83
Total		157	100
	No	91	57.96
	Yes	66	42.04
Aadhar Machine			
Total		157	100
	1-3	105	66.88

Table 1.2: Details of Infrastructure Available at Akshaya Centres

Printer	3-6	52	33.12
Tota	1	157	100
	1-3	104	66.24
	Above 3	53	33.76
Scanner			
Total		157	100
	1-3	99	63.06
Web Cam	Above 3	58	36.94
Total		157	100
	1-2	100	63.69
Photocopier	2-3	55	35.03
	Above 3	2	1.27
Total		157	100.0

Source: Primary Survey

In the case of infrastructure, the maintenance of equipment is one of the most important requirements for the effective functioning of Akshaya centers. An enquiry into the maintenance of equipments in Akshaya centers revealed that when half of the sample centers maintain their equipment twice in a year others maintain it more than twice.

b) Number of Workers and Working Days

Number of workers employed in various Akshaya centers show that only a small proportion of centers have enough workers. When 73 per cent of the enterprises are running with 2 or 3 workers, only 27 percent have more than 4workers. Regarding the working days, all the Akshaya centers are working except on Sundays. But in some urban centers second Saturdays are holidays.

	Number	Frequency	Per cent
Workers	2	21	13.38
	3	94	59.87
	4	24	15.29
	5 and above	18	11.46
Total		157	100.00

Table 1.3: Distribution of Akshaya Centers by Number of Workers and Working Days

Source: Primary Survey

C) Services provided in Akshaya Centers

Digitalization of services has necessitated a revolution in the design and operation of public services through the reinvention of service delivery channels. Emergence of digital organizations to create services led to better opportunities to meet citizens' needs directing to increased social inclusion.

The service provided by Akshaya centers can be broadly classified into seven categories such as (1) E-District services, (2) E- Payments ,(3) E- Filing,(4) E-Aadhar,(5)Pan card (6) Election Id (7),E-Grants,(8) E-Tickets(9) Kiosk banking and (10) other services.

Table 1.4 shows that all centers provide services like e-districts, e- payments, Pan Card, election ID and e-grants. But only a few centers offer e filling (36%) and Kiosk Banking (2.5%).

Services	Number	%
E-District	157	100.00
E- Payments	157	100.00
E-Filing	57	36.31

Table 1.4: Services Provided by AkshayaEntrepreneurs

E-Aadhar	155	98.73
Pan card	157	100.00
Election ID	157	100.00
E-Grants	157	100.00
E-Tickets	49	94.90
Kiosk Banking	4	2.55
Other Services	157	100.00

Source: Primary survey

d) Number of Transactions Carried Out.

The performance of the Akshaya centers are also assessed by characteristics of entrepreneurs with average number of transactions carried out.Table5.5 shows that the average number of total transactions carried out per day in Akshaya center is 55per cent. Out of these, 23.5 percent are e-governance transactions and 31.5 per cent are other type of transactions.

Locality wise analysis reveals that the average number of transactions are higher in urban areas (66) than in rural areas (52). The result of H test indicates that there is significant difference in the total transactions carried out, e-governance transactions and other transactions carried out in urban and rural areas as the significance level of H value is less than 0.05.

The gender wise analysis revealed that male entrepreneurs carry out more transactions (56.7) than female entrepreneurs (53).But there is no significant difference in the total transactions, e-governance and others carried out by male and female entrepreneurs as the significance level of H value is greater than 0.05.Average number of e-governance transaction carried out by male and female entrepreneurs were 26.7 and 23 respectively.

		No. of t	ransact	ions cari	ried out	per day		
Characteris	tics	Total Transactions			e-Governance transaction		Other Transactions	
		Mean	SD	Mean	SD	Mean	SD	
	Urban	66.03	26.42	32.26	17.80	33.76	13.56	
Locality	Rural	51.99	17.38	23.20	8.90	28.80	13.31	
Locality	Н	9.035		7.715		4.517		
	Sig.	0.003		0.005		0.034		
	Male	56.74 22.55		26.73	13.78	30.01	13.78	
Gender	Female	52.96	17.46	23.25	9.02	29.70	13.19	
denuel	Н	0.331		1.094		0.000		
	Sig.	0.565		0.296		0.997		
	Below 40	52.20	22.53	23.63	10.95	28.56	14.77	
	40-44	55.00	20.06	24.11	11.55	30.89	13.25	
Age	45 and Above	57.35	19.22	27.73	13.01	29.63	12.83	
	Н	3.537		3.487		1.751		
	Sig.	0.171		0.175	0.175			
	Plus Two	59.80	18.51	28.96	11.58	30.84	12.91	
	Degree	51.69	18.78	22.75	10.90	28.94	12.54	
Education	Post Graduate	53.24	12.90	24.76	9.61	28.47	9.87	
Luucation	Professional Degree	69.67	35.53	33.07	17.97	36.60	22.97	
	Н	6.688		11.356		0.547		
	Sig.	0.083		0.010		0.908		

Table 1.5: Number of Transactions Carried out per day in Akshaya Centers by Characteristics of Entrepreneurs

Total		55.03	20.43	25.16	11.96	29.87	13.47
	Sig.	0.002	1	0.073		0.025	1
WOIKEIS	Н	9.342		3.218		5.016	
Workers	Above 3	63.93	24.43	28.90	14.50	35.02	17.12
	Up to 3	51.78	17.80	23.79	10.63	27.99	11.39

Source: Primary Survey

Age wise analysis of the transactions show that the numbers of transactions are higher in the age group 45 and above and lower in the age group below 40. The H values found indicate that there issignificant difference between ages of entrepreneurs in the total transactions, e-governance transactions and other transactions. Also, an analysis of the transactions carried out with regard to the educational qualifications of Akshaya entrepreneurs revealed that there is no significant difference in the total transactions and other transactions carried out by the entrepreneurs according to their qualification as the significant elevel of H value is greater than 0.05.But in the case of e-governance transaction, there is significant difference in the qualification and transaction as the value of H is found less than 0.05. Similarly, average number of transactions analysed on the basis of the number of workers working in Akshaya Centres revealed that there is significant difference in the number of total transaction, e-governance transactions and other transactions carried out in Akshaya centers with the number of workers employed. But there is no significant difference in e-governance transactions with number of workers.

Analysis of number of transactions carried out in Akshaya Centres by the availability of infrastructure is given in table 5.6. The hardware wise analysis revealed that the Akshaya centers with more computers, Aadhar machines, printers, scanners, webcams and photocopiers have large number of total transactions, e-governance transactions and other transactions. The result of Kurskalwallis test indicates that there is significant difference in the total transactions carried out in the centers having more infrastructure as the significance level of H value is less than 0.05 (See Table 1.6).Thus it is pointed out that infrastructure significantly influences number of transactions.

Particulars		carried o	No. of transactions carried out /day on an average :-		E-Governance transaction /day on an average		Other Transactions	
		Mean	SD	Mean	SD	Mean	SD	
	Up to 3	34.63	6.92	15.19	5.62	19.44	5.90	
N. C	'4-5	50.75	10.62	24.34	8.19	26.41	8.85	
No. of Computer	Above 5	72.90	23.17	31.86	15.12	41.04	15.05	
Gomputer	Н	84.394	84.394		43.040			
	Sig.	0.000	0.000		0.000		0.000	
0		49.84	16.63	23.11	9.52	26.73	10.98	
Aadhar	1	62.38	23.03	28.06	14.32	34.32	15.39	
Machine	Н	15.765		4.416		9.116		
	Sig.	0.000		0.036		0.003		
	One	58.33	20.32	25.67	16.16	32.67	10.27	
	Two	38.57	14.60	17.00	7.63	21.57	9.23	
	Three	53.42	17.19	24.28	9.40	29.14	12.32	
Printer	More than three	60.87	23.63	28.50	13.78	32.37	15.92	
	Н	17.412		14.493	14.493			
	Sig.	0.001		0.002	0.002			
Scanner	Two	42.14	14.10	18.57	8.65	23.57	9.21	

Table 1.6: Number of Transactions Carried ou	t per day in Akshaya Centers by Availability of Infrastructure
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	Three	52.53	15.97	23.10	8.39	29.43	12.07
	Above three	64.06	24.77	31.00	15.17	33.06	15.99
	Н	18.938		20.464		6.298	
	Sig.	0.000		0.000		0.043	-
	Up to two	48.26	26.01	23.48	13.45	24.78	15.08
	Three	53.95	16.05	22.99	9.28	30.96	11.59
Web Cam	More than three	59.14	22.48	28.67	13.72	30.47	14.83
	Н	8.690		10.028		8.337	
	Sig.	0.013		0.007		0.015	
	One	50.70	16.08	22.93	9.13	27.77	11.54
Photocopiers	More than one	62.63	24.77	29.07	15.05	33.56	15.77
riococopiers	Н	9.818		6.536		4.296	
	Sig.	0.002		0.011		0.038	
Total		55.03	20.43	25.16	11.96	29.87	13.47

Source: Primary survey

e) Monthly income

Another important criterion used to assess the performance of Akshaya Centres is their average monthly income (See Table 1.7).From the table it can be seen that the average monthly income of total transactions carried out in Akshaya centers is Rs. 48229.3, out of which Rs.13770.7 earns from e-governance transactions and Rs.34458.6 earns from other type of transactions. The locality wise analysis revealed that in urban area monthly income from total transaction is Rs.58205.88, while in rural area it is Rs45471.54. The result of H test indicates that there is significant difference in the average monthly income from total transactions carried out in urban and rural areas as the significance level of H value is greater than 0.05.

Table 1.7: Average Monthly Income of Akshaya Centers

Characteristics		Average monthly Income							
		From All Transactions		From e-governance Transactions		From other Transactions			
		Mean	SD	Mean	SD	Mean	SD		
Locality	Urban	58205.88	23378.03	18176.47	10916.96	40029.41	16002.81		
	Rural	45471.54	16457.76	12552.85	5391.56	32918.70	12219.71		
	Н	9.550		8.928		5.894			
	Sig.	0.002		0.003		0.015			
Gender	Male	50104.65	20547.81	14767.44	8353.48	35337.21	14285.83		
	Female	45957.75	16406.82	12563.38	5607.99	33394.37	12259.67		
	Н	0.685		2.002		0.214			
	Sig.	0.408		0.157		0.644			
Age	Below 40	42902.44	14838.81	13731.71	7476.71	29170.73	9536.52		
	40-44	47400.00	18555.49	12553.85	6977.71	34846.15	12666.68		
	45 and Above	53568.63	20925.83	15352.94	7410.33	38215.69	15641.37		
	Н	4.985		6.915		7.851			
	Sig.	0.083		0.032		0.020			
Education	Plus Two	55920.00	21675.49	15840.00	6472.25	40080.00	16770.31		
	Degree	44216.87	16538.98	12626.51	6954.05	31590.36	11086.18		
	Post Graduate	49323.53	18487.87	13294.12	5368.42	36029.41	14575.79		

Performance of Akshaya Centres0n the Basis of the Availability of Infrastructure in Thiruvananthapuram District

	Professional Degree	55133.33	22109.68	17733.33	11774.47	37400.00	13335.24
	Н	7.735		7.980		6.779	
	Sig.	0.052		0.046		0.079	
Workers	Up to 3	46000.00	17736.87	13113.04	6470.94	32886.96	12751.86
	Above 3	54333.33	20600.34	15571.43	9055.77	38761.90	14326.86
	Н	4.688		1.290		6.098	
	Sig.	0.030		0.256		0.014	
	Total	48229.30	18844.80	13770.70	7303.73	34458.60	13400.87

Source: Primary Survey

A sex wise analysis of the monthly income shows that the average monthly income of male entrepreneurs from total transactions is Rs. 50104.65 while the average of monthly of female entrepreneurs is Rs.45957.75.The average monthly income of male entrepreneurs from e-governance transaction is Rs.14767.44 and female entrepreneurs is Rs.12563.38.However the other transactions are considered the average monthly income of male entrepreneurs is Rs.35337.21 and female entrepreneurs is Rs.33394.37.

Earnings by educational level indicate that the average monthly income of entrepreneurs having plus two is Rs. 55920.00 and from e-governance transaction is Rs.15840.00 and other transactions is Rs. 40080.00.The average monthly income of graduate entrepreneurs from total transaction e-governance transactions and other transactions is Rs.44216.87 ,Rs.12626.51 and Rs. 31590.36 respectively. While the average monthly income of post graduates entrepreneurs from total e-governance and other transactions are Rs.49323.53, Rs. 13294.12 and Rs. 36029.41 respectively. The average monthly income of professionally qualified entrepreneurs from total, e-governance and average transactions is Rs.55133.33, Rs. 17733.33 and Rs. 37400.00 respectively. The result of H test of educational qualification of the entrepreneur and monthly income reveals that there is no significant relationship between the educational qualification and monthly income. The average monthly income with respect to the number of workers shows that there is significant difference as the number of workers increases.

The availability of hardware with respect to monthly income shown in Table 1.8.

	From All Transactions		From e-governance Transactions		From other Transactions	
	Н	Sig.	Н	Sig.	Н	Sig.
No of Computer	58.310	0.000	42.241	0.000	55.324	0.000
Aadhar Machine	4.313	0.038	0.249	0.618	7.007	0.008
Printer	20.138	0.000	14.565	0.002	21.830	0.000
Scanner	26.824	0.000	18.532	0.000	26.565	0.000
Web Cam	11.507	0.003	8.529	0.014	14.270	0.001
Photocopier	4.467	0.035	5.647	0.017	2.699	0.100

Source: Primary Survey

The analysis shows that there is significant difference in the number of number of computers, Aadhar machine and printer in total transaction and monthly income but there is no significant difference in terms of printer, scanner, web cam and photocopier and income of the entrepreneurs while in terms of e-governance transactions there is significant difference in monthly income and the availability of these equipment. But there is no significant difference in other transactions with respect to monthly income and availability of hardware

II. DISCUSSION

Thus the assessment of performance of Akshaya centres made on the basis of facilities available including infrastructure facilities, service provided, number of transactions and monthly income reveals that with regard to infrastructure, most of the Akshaya centres have average hardware facilities. In the case of

workers employed in various Akshaya centers, only one fourth have enough workers. When all the centers provide services like e-districts, e- payments, Pan Card, election ID and e-grants only a few centers offer e filling and Kiosk Banking. Assessment of Akshaya centres made on the basis of number of transactions show that there is significance difference in the number of transactions carried out in locality wise, age wise and number of workers. But there is no significant difference with respect to gender and educational qualification. The hardware wise analysis revealed that the Akshaya centers with more hardware have large number of total transactions, e-governance transactions and other transactions. A sex wise analysis of the monthly income of the Akshaya Centres show that the average monthly income of male entrepreneurs is higher than the average monthly income of female entrepreneurs. Thus, there is significant difference in the average monthly income from all the transactions carried in sex wise, locality wise and availability of hard ware. Educational qualification of the entrepreneur and monthly income reveals that there is no significant relationship between the educational qualification and monthly income significant difference as the number of workers increases.

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