ANALYZING THE SOURCES OF KNOWLEDGE INFORMATION TO THE AGRI-INPUT RETAILERS

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ABSTRACT

The traditional agri-input retailers located in villages have also played significant role in agricultural production process. Several studies have indicated that they had been the primary source of information to the farmers on cultivation aspect. Their presence in the village at all times, familiarity of being known as a village person, provision of credit sales etc., had made them indispensable to farmers. Considering the above aspects, it was deemed essential to study the sources of knowledge information for the agri-input retailers. Accordingly, the study was undertaken to analyze the sources of Knowledge information to the agri-input retailers. The population for this study comprised of trained and untrained agri-input retailers in the Western zone of Tamil Nadu. The total sample size was 240 agri-input retailers (120 trained and 120 untrained retailers) drawn from the population of study. The Rank Based Quotient (RBQ) technique was used to analyse the sources of knowledge information to the agri-input retailers. The analysis of the demographic traits of agri-input retailers revealed that well educated and experienced retailers chose to undergo training programmes. The company representatives, trainings and advisory from University and the state extension department and meetings conducted by the dealers association played a major role in delivering the needed information to agri-input retailers.

KEYWORDS: Knowledge Management, Rank Based Quotient, Training, Agri-Input Retailers

INTRODUCTION

Knowledge was considered as a key determinant for enterprise competitiveness in the knowledge economy. Knowledge management system was considered a special resource (Krstic, 2011) which should be managed with more effectiveness and efficiency. It was deemed to be an essential factor for achieving the success of the firm. According to Wang *et al*., (2009) knowledge management (KM) was a way for managers to cope with the heightened complexity of an increasingly global marketplace. Knowledge-Based View (KBV) explained firm performance as a function of a firm's ability to adapt to its environment (Cockburn *et al*, 2000). Knowledge based literature posited that the ability to embed available information and experiential knowledge in relevant organizational capabilities was a key theoretical premise (Teece *et al*., 1997). Many of the KBV research had identified the ability to leverage an existing knowledge base by transferring and combining knowledge to develop superior organisational capabilities as a driver of firms' success in

adapting to their environments in terms of product and process innovation, managing competitive and regulatory risk and utilizing available resources. Thus, firms should introduce significant changes in their business operations to meet the stringent competition in the business environment.

Knowledge management assisted the firms to develop strategic capabilities to deal with the enhanced dynamism and uncertainty of the business environment. Through the systematic acquisition, creation, sharing, and use of knowledge, organizations develop, renew, and exploit their knowledge-based resources, thereby allowing them to be adaptable to external changes and attain competitive success. The knowledge management orientation concept encapsulated the organizational mechanisms of managing explicit and tacit knowledge within and from outside the organization, and underpin knowledge management efficiency and effectiveness, which were conducive to firm performance (Gupta and Govindarajan, 2000). Entrepreneurs with more knowledge would be less uncertain regarding their effectiveness and they would be able to learn and notice changes on the market faster. Interestingly, while knowledge management was centered on a firm's efforts to draw on individuals' collective wisdom in such a way as to perform important tasks well (e.g., providing the products and services that customers want), the behavioral efforts of integrating achieved knowledge with the firm's ability to share, assimilate, and be receptive to new knowledge had not been theoretically connected to firm-level performance (Wang *et al*., 2009).

Agriculture sector had been a part of Indian economy on account of its linkage with other sectors and the fact that about 60 per cent of the population depend on it for livelihood. Since green revolution, agriculture had become increasingly commercialized and technological and infrastructure developments have made it more and more knowledge based. Precision farming, protected cultivation, drip and fertigation technologies, bio-technology, export opportunities, commodity exchanges, globalization etc have brought about significant changes in agricultural production process. Private sector investment in cash crops had brought out numerous hybrids and cultivation of these hybrids was not only capital intensive but also knowledge intensive. Considering the trend in progress and opening up of related sector, knowledge based domestic and globally linked agricultural value chains will emerge on a large scale. On the other hand, the traditional agri-input retailers located in villages have also played significant role in agricultural production process. Several studies have indicated that they had been the primary source of information to the farmers on cultivation aspect. Their presence in the village at all times, familiarity of being known as a village person, provision of credit sales etc., had made them indispensable to farmers. Considering the above aspects, it was deemed essential to study the sources of knowledge information for the agri-input retailers. Accordingly, the study was undertaken to analyze the sources of Knowledge Management for agri-input retailers.

METHODOLOGY

The population for this study comprised of trained and untrained agri-input retailers in the Western zone of Tamil Nadu. The total sample size was 240 agri-input retailers (120 trained and 120 untrained retailers) drawn from the population of study. The Rank Based Quotient (RBQ) technique was used to analyse the sources of knowledge information to the agri-input retailers. Rank Based Quotient (RBQ) analysis was done as outlined by Sabarathnam, 1988.

$$RBO \equiv \frac{(F_i)(n+1-I)}{Nn} \times 100$$

Where,

RBQ = Rank Based Quotient

Fi = Frequency of attributes for the ith sources of knowledge information

N = number of customers contacted

n = maximum number of ranks given for the source of knowledge information by the retailers

I = rank of the attributes given by the retailers

The source with the high RBQ score was considered the most preferred source of knowledge information by the sample respondents.

RESULTS AND DISCUSSIONS

The demographic characteristics like age, level of education, experience in agri-input retailing and sources of knowledge information of the sample trained and untrained agri-input retailers were analysed and the results are discussed.

Age of the Respondents

Age of the respondents is supposed to influence the performance of firm. Kristiansen *et al*., (2003) in their study found a significant relationship between age of an entrepreneur and business success. Thus, age is an important demographic variable and it is essential to analyse the age of the respondents. The results of the analysis are furnished in Table 5.1.

Table 1: Age Group of the Respondents

Age Groups	Trained Agri-Input Retailers		Untrained Agri-Input Retailers	
	No. of Respondents	Percentage	No. of Respondents	Percentage
Less than 30 years	9	7.50	10	8.33
31 – 40 years	33	27.50	33	27.50
41 – 50 years	47	39.17	46	38.33
More than 50 yrs	31	25.83	31	25.83
Total	**120**	**100.00**	**120**	**100.00**

It could be inferred from the Table 5.1 that major share of the trained and untrained agri-input retailers were in the age group of 41 to 50 years followed by retailers in the age group of 31 to 40 years and more than 50 years. It could be concluded that agri-input retailers were in the middle and old age category and only a meager share of them were young.

Education Level of the Respondents

Education status of an entrepreneur plays a major role in performing various business activities in an effective manner. Thapa (2007) also reported a positive association between education and success of small business. The results are furnished in the Table.2.

Table 2: Educational Level of the Respondents

Education	Trained Agri-Input Retailers		Untrained Agri-Input Retailers	
	No. of Respondents	Percentage	No. of Respondents	Percentage
High school	7	5.80	26	21.70
Higher secondary	33	27.50	56	46.70
Diploma	29	24.20	17	14.20

Graduation	51	42.50	21	17.50
Total	**120**	**100.00**	**120**	**100.00**
Calculated χ^2 value= 32.50 ; Table χ^2 value= 24.99; d(f)= 3				

As far as the educational levels of the trained agri-input retailers were concerned, about 43 per cent were graduates followed by 27.50 per cent with higher secondary level of education and 24.20 per cent had diploma. About 47 per cent of untrained agri-input retailers were educated up to higher secondary followed by 21.70 per cent of them with school education and 17.5 per cent of them were graduates. The chi-square analysis revealed that the education status of the trained and untrained agri-input retailers were statistically different. It could be concluded that the level of education was significantly associated with training. The share of the trained agri-input retailers was higher with level of education.

Experience of the Respondents

Experience in enterprise activity can facilitate businessman to gain knowledge about the business and also make them experts in their field. Chrisman *et al.*, (2005) reported that the knowledge gained from previous experience was essential for success of small firms. Therefore the experience of the respondents was analysed and the results are presented in the Table 5.3.

Table 3: Experience of the Respondents

Experience	Trained Agri-Input Retailers		Untrained Agri-Input Retailers	
	No. of Respondents	**Percentage**	**No. of Respondents**	**Percentage**
Less than 5 years	0	0.00	1	0.83
5 – 10 years	7	5.83	14	11.67
11 – 15 years	27	22.50	53	44.17
16 – 20 years	56	46.67	39	32.50
More than 20 years	30	25.00	13	10.83
Total	**120**	**100.00**	**120**	**100.00**
Calculated χ^2 value= 21.50 ; Table χ^2 value= 9.49; d(f)= 4				

From Table 3, it could be seen that 46.67 per cent of trained agri-input retailers were having an experience of 16 to 20 years in agri-input retailing followed by agri-input retailers with more than 20 years (25 per cent). No one had less than five years of experience. About 44 per cent of untrained retailers were in this business for 11 to 15 years while 32.50 per cent of them had 16 to 20 years experience. The calculated chi-square value was more than the table value implying that the trained agri-input retailers had statistically significant higher experience than the untrained retailers.

The analysis of the demographic traits of agri-input retailers revealed that well educated and experienced retailers chose to undergo training programmes. Hence, the efforts must be taken to encourage less educated and less experienced retailers to undergo training programmes on distance education mode.

Sources of Knowledge Information to the Agri-Input Retailers

The agri-input retailers were asked to rank the different sources of knowledge information which they found to be important and accessible. The data collected was analyzed using Rank Based Quotient (RBQ) technique and the results are furnished in the Table 4. The sources with highest RBQ score indicated that they were important for agri-input retailers for improving their knowledge.

Tables 4: Mean Score Rankings for the Different Sources of Knowledge

Sl. No	Sources	Trained Agri-Input Retailers		Untrained Agri-Input Retailers	
		Mean Scores (Per Cent)	Rank	Mean Scores (Per Cent)	Rank
1	Leaflets and discussion with company representatives	93.79	I	98.02	I
2	Trainings and technical advices through State Agricultural University	91.64	II	66.21	IV
3	Dealers association meetings	65.79	III	94.68	II
4	Technical advices and guidance by the state extension department	59.50	IV	84.84	III
5	Special events like trade fairs	58.00	V	59.44	V
6	News papers	46.64	VI	58.81	VI
7	Internet searches	36.36	VII	12.30	X
8	Television	29.36	VIII	26.98	VIII
9	Magazine	28.86	IX	18.97	IX
10	Conferences and seminars	27.43	X	47.22	VII

It could be observed from the Table 5.4, that the major source of knowledge information for both trained (93.72) and untrained agri-input retailers (98.02) was from the leaflets and discussion with company representatives. Trainings and technical advices through State Agricultural University (91.64) was the second major source followed by dealers' association meetings (65.79) for trained agri-input retailers.

In case of untrained agri-input retailers, the major source of knowledge information was through meetings at dealers association (94.68), and technical advices and guidance by State Extension department (84.84). Technical advice through State Agricultural University (66.21) was the fourth major source for the untrained agri-input retailers. The other sources were television, magazine, conferences and seminars, and internet.

It could be concluded that the company representatives, trainings and advisory from University and the state extension department and meetings conducted by the dealers association played a major role in delivering the needed information to agri-input retailers.

CONCLUSIONS

Knowledge Management Orientation is the degree to which a firm demonstrates behaviors of organized and systematic Knowledge Management (KM) implementation. The sources of Knowledge information for the agri-input retailers (trained and untrained) were examined. The analysis of the demographic traits of agri-input retailers revealed that well educated and experienced retailers chose to undergo training programmes. The company representatives, trainings and advisory from University and the state extension department and meetings conducted by the dealers association played a major role in delivering the needed information to agri-input retailers. Direct interaction between agri-input retailers and these sources was prioritised high in order, whereas their efforts to gain knowledge by self accession of information from mass media such as television, magazines, participation in conferences, seminars and internet was less preferred. Abundant information is disseminated through mass media which was given less priority by the agri-input retailers for accessing knowledge information. The training institutions must prioritise the sources of information for the agri-input retailers and reorient the trainees to understand the importance of self seeking from such sources of abundant information.

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