

A CASE STUDY APPROACH TO HUMAN RESOURCE PLANNING - HRP- IN WEAVING INDUSTRY OF MARUTHAMUNAI

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ABSTRACT

There are two case studies. First case is Royal Hand Loom (RHL) which has a single weaving factory. The second case is AAA Hand Loom (AAAHL) which has eight weaving factories. Research objective is to apply the Human Resource Planning Model HRPM- for RHL and AAAHL introduced by Walker and Dyer (1980). 9 weaving factories falling in two cases have also been selected as sample size by systematic sampling method. Data were obtained using secondary data collection method via historical sales force data. A shortage of human resources of RHL would be 8 and 12 and that of AAAHL would be 103 and 182 on both individual territory base and total territory base. RHL and AAAHL can plan its action to bridge the gap identified by short term solutions like an increased overtime -OT-, hiring of temporary sale people and long term solutions like recalling, retraining and hiring of permanent sales people.

Keywords: Human Resource Planning, Weaving Industry, Maruthamunai

INTRODUCTION:

Human Resource Planning (HRP) is the process used by organizations to analyze business plans to establish future human resource requirements, to estimate future human resource availabilities, to reconcile future human resource requirements and future human resource availabilities and to formulate action plans to remove the gap of human resources. Organizations have been good in developing manufacturing, marketing and financial plans. But, there are a bit of Human resource plans Herbert (G. Heneman III, Donald, P. Schwab, John, A. Fosum and Lee D. Dyer, 1993). A number of studies showed about 80 % of the middle sized and larger companies now do HRP on a regular basis (Craft, J. 1988). These planning processes have comprehensive and sophisticated techniques (Dyer, L. 1985). There a number of similar or same weaving factories who have sales people. There are high chances for salespeople shift from one weaving factory to another easily. There are a number of competitive weaving factories in the industry. If one salesperson got dissatisfied with an existing weaving factory he will easily join as sales people for some other weaving factories. This research paper is organized into background of the study, cases at a glance, statement of the problem & research question, literature review, research design and methodology (RDM), results, discussion of findings and conclusions.

BACKGROUND OF THE STUDY:

Maruthamunai is a town which comes under the Divisional Secretariat of Kalmunai, Ampara, Eastern Province of Sri Lanka. People in this town have been running weaving factories long ago from their ancestors. This industry has a long history in Maruthamunai. Weaving industry is a manufacturing and a marketing industry. Technological skills are applied in a micro level to this industry. There are power looms in some other countries like India. Handlooms are only available in weaving factories of Marutamunai. Outputs are sarees, sarongs, handkerchiefs, etc. Outputs are sold in their manufactories or outside the District. The Inflation Rate based on GDP Implicit Deflator was 14.0 % 16.3 %, 2007 & 2008 (Department of Census and Statistics, 2009). Prices for inputs such as yarn increased exorbitantly. Government earlier gave subsidy for purchasers of yarn. It has stopped thereafter. Tsunami of December, 2004 caused widespread destruction, killed over 31,000 people, destroyed over 99,000 homes. A number of families in this village lost their homes and weaving factories. A significant number of families have shifted to somewhere else having abandoned of weaving factories. This situation further eroded this industry. Earlier, there was an acute demand for outputs. Now, sales and market share are declining. Sri Lanka's estimated population was 19.25 million with an annual population growth rate of 1.3% along with an increased Life Expectancy at birth of 73 years (Department of Census & Statistics, 2001). After the rise of the populational growth sales are declining. It is mostly a labour- intensive industry. Buyers buy alternative brands of output imported from countries like India and Indonesia. They are somewhat cheaper than that of outputs made in Maruthamnuaui. There are still a number of customers, retailers and wholesalers who sell the outputs in Ampara and out of Ampara Districts.

CASES AT A GLANCE:

Case one: Royal handloom (RHL):

Royal Hand Loom (RHL) is a weaving factory which covers a niche market. It is having 10 handlooms. It is a manufacturing and distribution centre. It does not have a formal organizational chart. Management hierarchy includes all top level, middle level and lower level functions are carried out by owner on its own and alone. Owner acts as top level executive, functional manager and lower level manager (supervisor). Manufacturing process refers to input is converted into output. Input refers to 5Ms such as manpower, machinery, material & money. Manpower includes weavers and assistants to weavers. Machinery includes handloom, shuttle, beam, bobbin, etc. Material incorporates yarn. Money embraces money needed for manpower such as weavers and assistants to weavers purchase of machineries such as handloom, shuttle, beam, bobbin, etc., material such as yarn. Process refers to the production process. It converts raw material into output. Yarn is converted into sarongs, sarees and handkerchiefs using necessary inputs. Output refers to the final product such as sarongs, sarees and handkerchiefs.

Case two: AAA handloom (AAAHL):

AAA Hand Loom (AAAHL) is a weaving factory which covers around 50 % of market. There are seven small factories (seven subsidiaries) which are owned by boss of AAAHL. Each subsidiary has fourteen (14) handlooms on its own. It has 98 (7 * 14) handlooms in several places of Maruthamunai. There are seven handloom factories (7 owners- muthalaalies). Each has employees (weavers) & assistants to employees (assistants to weavers). Management hierarchy refers to all top level, middle level and lower level functions are carried out by seven handloom factories (7 owners- muthalaalies) on their own and alone. Owners (7 owners- muthalaalies) act as top level executive, functional manager and lower level manager (supervisor). Owner (boss) is the overall in charge of the 7 handloom factories. Production process and Output are similar as at RHL.

STATEMENT OF THE PROBLEM (SOP) & RESEARCH QUESTION (RQ):

Case one: Royal handloom (RHL):

Researcher informally interviewed owner of RHL with regard to distribution. RHL manufactures and distributes its products such as sarongs, sarees, handkerchief, etc. Its vital products are sarong called "Padayappaa" in the Eastern Parts of the Island. It has a limited number of final customers, retailers and wholesalers buy sarongs daily (Padayappa brand). It has few distributors outside Eastern Province. Sales force turnover is lower among other weaving factories owing to controllable causes. RHL is the cost leader. There is an expectation that number of sarongs sold daily to customers, retailers and wholesalers – 2011 (Padayappa brand) of RHL would remain similar. Expected number of sarongs sold daily to wholesalers – 2011 (Padayappa brand) of AAAHL would be around 10, 000.

Case two: AAA handloom (AAAHL):

Researcher informally interviewed owner of RHL with regard to distribution. 8 factory owners entrust output with owner (boss). These 7 factory owners did not distribute items to anybody. Boss only distributes them all over the island. Boss has a number of wholesalers who buy sarongs daily (Padayappa brand) for reselling at a margin to retailers who in turn distribute to customers. 7 factory owners also manufacture and distribute its products such as sarongs, sarees, handkerchief, etc. to AAAHL which in turn distributes the items i.e. sarongs called "Padayappaa" in almost all

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part of the country through wholesalers. It has a number of wholesale outlets outside Eastern Province. Sales force turnover is lower among other weaving factories owing to uncontrollable causes. AAAHL is the cost leader. There is an expectation that number of sarongs sold daily to wholesalers – 2011 (Padayappa brand) of AAAHL would be around 10, 000.

Researcher informally interviewed weaving factory owners and studied recent past sales force data of RHL and AAAHL. Research question lies on sales force turn over (SFTO). Research question is raised as “is there an effective Human Resource Planning -HRP- for both RHL and AAAHL’s weaving factories?”. Objectives are to forecast expected number of sarongs sold by both RHL and AAAHL and to apply the Human Resource Planning Model -HRPM- for RHL and AAAHL.

LITERATURE REVIEW:

Nufile (2011) carried out a research on contribution of Shakath on poverty reduction: an empirical study of role Shakath foundation in Maruthamunai. Ismail (2011) is working on a research paper titled on “Sales Force Turn Over (SFTO): A Case Study of Weaving Industry of Maruthamunai”. Ismail (2011) is working on a research paper termed as “Association between brand preferences of market leader and niche market: A case study of weaving industries of Maruthamunai”. Other than these three literatures, there are no journal articles up to the reference of the researcher.

RESEARCH DESIGN & METHODOLOGY (RDM):

Exploratory research design:

Informal interview and production and sales records kept by owner as secondary data are applied to define research problem. Research problem is identified via explorative (qualitative) research design. Conclusive research design is done by descriptive. Cross- sectional research design as a part of descriptive research design is also designed. Data are collected only once from sample out of population.

METHODOLOGY:

Target Population of Primary Sampling Units (PSUs) are 210 weaving factories located in Maruthamunai. Sample size of the PSU is selected by two stage cluster sampling using Probability Proportionate to Size (cumulative total method). 9 weaving factories have been selected as PSU. These 9 PSUs have been considered as two case studies. One is RHL which has only one weaving centre. The other is AAAHL which has seven weaving centres. Target Population of Secondary Sampling Units (SSUs) is all the owners of weaving factories.

Sample size of SSU also equals to 9. Systematic sampling method is used as sampling technique to select sample size of SSU. Owner of every twenty third weaving factory are selected as SSU.

RESEARCH FRAMEWORK:

Walker and Dyer (1980) has introduced an Human Resource Planning Model -HRPM-which consists of five phases such as determination of future Human Resource Requirement -HRR-, determination of future Human Resource Availabilities -HRA-, internal and external environmental scan, reconciliation of future HRR and future HRA and development of an action plan. Researcher also follows the same HRPM put forward by Walker and Dyer in 1980.

DATA COLLECTION:

Data are obtained using secondary data collection method via historical sales force data. Researcher used trained enumerators contacting and visiting owner, wholesaler and retailer for

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sales force data. Trained enumerators were A/L school leavers of KM/ Shams Central College. 09 School leavers undertook to collect data for sales people. After collecting sales force data, they have been cross checked by the chief researcher.

Case one: Royal handloom (RHL)- recent historical sales territory data of RHL:

Researcher collected secondary data of sales force by contacting owner of RHL and by contacting wholesales and retails outlets in Oluvil and Akkaraipattu. Researcher contacted owner of Royal Hand Loom -RHL- named as Mr. Seeni Mohamed Mohideen Bawa. He had the records of salespeople for Maruthamunai, Kalmunai, Sainthamaruthu, Nintavur, Addalaichenai and Pottuvil. He did not have the records of sales people. He had the records for wholesales outlets in Oluvil and Akkaraipattu. Researcher contacted wholesales outlets in Oluvil and Akkaraipattu. Wholesalers had the records for retail outlets in Oluvil and Akkaraipattu. Researcher further contacted retail outlets in Oluvil and Akkaraipattu. Retailers in Oluvil and Akkaraipattu had the records for salespeople in Oluvil and Akkaraipattu.

Recent historical sales territory data of AAAHL:

Researcher collected secondary data of sales force by contacting owner of AAAHL. He did not have the records of sales people in Colombo, Kandy, Galle, Matara, Kurunegala, Ampara, Moneragala and Badulla. He had the records for wholesales outlets in those Districts. Researcher contacted wholesales outlets in those Districts. Wholesalers had the records for retail outlets in those Districts. Researcher further contacted retail outlets in those Districts. Retailers in those Districts had the records for salespeople in those Districts.

RESULTS:

Objective 1: to forecast expected number of sarongs sold by both RHL and AAAHL:

Recent historical production & sales data for 2010 was 257 and 246 units. Expected production and sales data for 2011 of Royal Hand Loom (RHL) would be 260 and 246 units. It is tabulated in table 1. AAAHL's (AAAHL's boss) recent historical production and sales data for 2010 was 1831 and 1545 units. Expected production and sales data for 2011 of AAAHL would be 1835 and 1545 units. It is tabulated in table 2.

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1		6 Thursday (Payment)	40	40	40	40
		7 Fri da y (off)	00	00	00	00
		Total	255	244	261	244
	3	1	39	39	45	40
		2	43	40	40	40
		3	43	40	45	40
		4	44	38	44	40
		5	48	48	50	48
		6 Thursday (Payment)	40	40	40	40

TABLE 1 HISTORICAL DAILY PRODUCTION AND SALES RECORDS CUM OWNER'S OPINION –RHL-

Month	Week	Day	Number of Sarongs produced daily - brand)	brand) Number of Sarongs sold daily to customers, retailers and wholesalers – brand)	Expected number of Sarongs produced daily -	Expected number of Sarongs sold daily to customers retailers and wholesalers – 201 Padayappa brand
	1	1	41	40	42	40
		2	42	42	44	42
		3	43	38	45	38
		4	44	40	44	40
		5	45	45	45	45
		6 Thursday (Payment)	40	35	40	35
		7 Frid ay	00	00	00	00
	2	(off)				
		Total	255	240	260	240
		1	40	40	44	40
		2	44	40	44	40
		3	43	40	45	40
		4	44	44	44	44

2		7 Fri day (off)	00	00	00	00
		Total	257	245	264	248
	4	1	41	41	41	41
		2	42	42	42	42
		3	43	40	43	40
		4	44	40	44	40
		5	45	35	45	35
		6 Thursday (Payment)	40	40	40	40
		7 Fri day (off)	00	00	00	00
	Total	255	238	255	238	
	5	1	41	41	45	40
		2	42	40	42	40
		3	43	42	43	42
		4	44	40	45	40
5		45	45	45	45	
6 Thursday (Payment)		40	40	40	40	
7 Fri day (off)		00	00	00	00	
Total		255	248	260	247	
6	1	39	38	39	38	
	2	43	40	43	40	
	3	43	40	43	40	
	4	44	40	44	40	
	5	48	48	48	48	

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	6 Thursday (Payment)	40	40	43	40
	7 Friday (off)	00	00	00	00
	Total	257	246	260	246

**TABLE 2 HISTORICAL DAILY PRODUCTION AND SALES RECORDS OF AAAHL
SUBSIDIARY 7**

CUM EXPECTED PRODUCTION AND SALES

Month	Week	Day	Number of Sarong produced daily by subsidiaries 2010 Padayappa brand	Number of sarong sold daily to wholesalers 2010 Padayappa brand)	Number of Sarong produced daily by subsidiaries 2011 Padayappa brand	Number of sarong sold daily to wholesalers 2011 Padayappa brand)
	1	1	293	250	296	255
		2	296	245	296	250
		3	305	300	307	285
		4	308	300	310	300
		5	335	300	335	300
		6 Thursday (Payment)	280	250	286	275
		7 Friday (off)	000	000	000	000
		Total	1817	1645	1831	1665
	2	1	296	290	301	295
		2	308	300	314	285
		3	309	300	311	300
		4	320	300	323	300
		5	320	300	323	300
		6 Thursday (Payment)	30	300	310	300
Total		1817	1645	1831	1665	

1		7 Friday (off)	00	000	000	000
		Total	1861	1790	1882	1780
	3	1	293	250	293	245
		2	305	250	305	250
		3	307	250	307	250
		4	314	300	314	295
		5	336	300	343	298
		6 Thursday (Payment)	320	300	320	300
		7 Friday (off)	000	000	000	000
		Total	1875	1650	1882	1638
	4	1	303	250	303	265
		2	308	275	308	295
		3	313	275	313	275
		4	316	250	316	250
		5	315	300	315	300
		6 Thursday (Payment)	320	285	325	285
		7 Friday (off)	000	000	000	000
		Total	1875	1635	1880	1545
	5	1	291	250	292	250
		2	294	245	295	245
		3	299	245	300	245
		4	308	300	309	300
		5	315	215	315	215
		6 Thursday (Payment)	296	290	296	290
2		(Payment)				
		7 Friday (off)	000	000	000	000
		Total	1803	1545	1808	1545
	6	1	279	250	280	250
		2	309	250	310	250
		3	309	250	310	250
		4	318	300	319	300

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	5	336	245	336	245
	6 Thursday (Payment)	280	250	280	250
	7 Friday (off)	000	000	000	000
	Total	1831	1545	1835	1545

Objective 2: to apply the Human Resource Planning Model -HRPM- :

Reconciliation between HR requirement and HR availabilities for RHL is calculated to identify shortage of human resources. There would be a shortage of 8 and 12 people on the basis of individual and total territory base. It is shown in table 3. Reconciliation between HR requirement and HR availabilities for AAAHL is calculated for identifying the shortage of human resources. There would be a shortage of 103 and 182 people on the basis of individual and total territory base. It is shown in table 4.

TABLE 3 SHORTAGE OF HUMAN RESOURCES FOR RHL

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Serial number of sales territory	Name of sales territory	N (demand for sales round people) in figures	Anticipated supply salespeople of	Gap (shortage/ excess)
1	Maruthamunai	3	2	1
2	Kalmunai	3	2	1
3	Sainthamaruthu	3	2	1
4	Nintavur	3	2	1
5	Oluvil	6	5	1
6	Addalaichenai	3	2	1
7	Akkaraipattu	6	5	1
8	Pottuvil	3	2	1
Individual territory Base		30	22	8
Total territory Base		34	22	12

TABLE 4 SHORTAGE OF HUMAN RESOURCES FOR AAAHL

Serial of territory	number sales	Name of sales territory	N (demand for sales people) in round figures	Anticipated supply	Gap (shortage/ excess)
1		Colombo	21	10	11
2		Kandy	26	12	14
3		Galle	19	9	10
4		Matara	32	15	17
5		Kurunegala	19	9	10
6		Ampara	19	9	10
7		Moneragala	32	15	17
8		Badulla	26	12	14
Individual territory			194	91	103
Entire territory			273	91	182

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DISCUSSION OF FINDINGS:

Recent historical production for the year 2010 reveals that there no fluctuation. Daily and weekly production also indicates that there is no fluctuation. This is same to the sales data for the year 2010. Expected production and sales data for the year 2011 shows the most similar production and sales for RHL. It can be concluded that expected production and sales of RHL remains similar as at 2010. Recent historical production for the year 2010 reveals that there fluctuation. Daily and weekly production also indicates that there is no fluctuation. Recent historical sales for the year 2010 reveal that there fluctuation. Daily and weekly sales indicate that there is fluctuation. There is no fluctuation in expected production for the year 2011. But, there is fluctuation in expected sales for the year 2011 for AAAHL. It can be concluded that expected production of AAAHL remains similar as at 2010. but, expected sales declines due to higher Sales Force Turn Over Rate -SFTOR- than previous year. Gap of RHL has been identified both individual and entire bases. Individual territory base reveals that expected demand for salespeople is 30. Anticipated supply for salespeople is 22. There is a gap of 8 salespeople. Entire territory base reveals that expected demand for salespeople is 34. Anticipated supply for salespeople is 22. There is a difference of 12 salespeople.

Gap of AAAHL has been identified both individual and entire bases. Individual territory base reveals that expected demand for salespeople is 194. Anticipated supply for salespeople is 91. There is a gap of 103 salespeople. Entire territory base reveals that expected demand for salespeople is 273. Anticipated supply for salespeople is 91. There is a difference of 182 salespeople.

CONCLUSIONS:

Expected production and sales of RHL remains similar as at 2010. Expected production and sales of AAAHL remains similar as at 2010. but, expected sales declines due to higher Sales Force Turn Over Rate -SFTOR- than previous year.

A shortage of RHL has been identified both individual and entire bases. Individual territory base reveals that there is a gap of 8 salespeople. Entire territory base reveals that there is a gap of 12 salespeople. Although there is small difference between individual and entire base HRP It is better to follow individual base HRP rather than Total base HRP. RHL can plan its action to bridge the gap identified by short term and long term solutions. Short term solutions can be an increased overtime OT-, hiring of temporary sale people. Long term solutions can be recalling, retraining and hiring of permanent sales people.

A shortage of AAAHL has been identified both individual and entire bases. Individual territory base reveals that there is a gap of 103 salespeople. Entire territory base reveals that there is a difference of 182 salespeople. There is a vast difference between individual and entire based HRP It is advisable to follow individual based HRP. AAAHL can also plan its action to bridge the gap identified by short term and long term solutions as suggested in above.

IMPLICATION FOR OWNERS OF WEAVING CENTRES:

Expected production and sales remains similar as at 2010. Although there is small gap between individual and total based HRP It is better to follow individual base HRP rather than total based HRP. Expected production and sales remains similar as at 2010. but, expected sales declines due to higher SFTOR than previous year. There is vast gap between individual and total based HRP It is advisable to follow individual based HRP.

LIMITATIONS & FUTURE RESEARCH AVENUES:

This research is geographically based on Maruthamunai, Kalmunai Divisional Secretariat, Ampara, Eastern Province of Sri Lanka. Total based HRP is more advisable than individual based HRP for avoiding overestimation problems in expected number of salespeople and expected gap of sales

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people. Forecasting is based upon judgment of owners of both RHL and AAAHL. Subjective nature of forecasting can have estimation problems. Therefore, researcher permits other researchers to carry out research removing these deficiencies in future.

VALUE ADDITION:

Human Resource Planning -HRP- is a plan for estimating demand and supply for salespeople through which a gap (shortage or excess of salespeople) can be identified. This gives value to the firm in the form of cost minimization by maintaining approximately exact number of sales people. Weaving centres can prevent fluctuation of sales which optimizes profit and survival of the firms in weaving industry.

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