A Study of Nachiyar Koil Lamp Manufacturers-
Business Model

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Abstract

Objectives: The Nachiyar Koil lamp manufacturers are popular for their handcrafted brass lamps. The study is mainly based on the understanding of business model of the lamp manufacturers about their administration, cluster formation revenue formation, production, labor turnover, annual sales, export range, product distribution, borrowings & saving pattern and barriers in the business. The primary data has been collected from 20 lamp manufacturers on all above aspects were collected and analyzed using SPSS software. Methodology: The study has 20 lamp manufacturers chosen by means of simple random sampling method from Nachiyar Koil. The data collected has been analyzed by using the correlation & Regression analysis with the help of SPSS software. The analysis includes consumption of raw material, investment, employment opportunities, business administration, exporting, Types of transportation, sales & profit margin, borrowings, license, saving pattern, Bank A/C, Insurance policy of Nachiyar Koil lamp manufacturers. Findings: The study analyse the perspective of business model, lifestyle and growth opportunities of Nachiyar koil lamp manufacturers. From the study it is clear that the age of Nachiyar koil lamp manufacturers influence the lifestyle (31.2%), business model & operation 12% and growth opportunity of 10%. Applications/Improvements: The study will be an eye opener for the economist, government officials and social activist in enhancing the welfare measures of Nachiyar koil lamp manufacturers.

Keywords: Growth Opportunities, Lamp Manufacturer, Life Style, Revenue Production

1. Introduction

India is a developing nation with more than 85% unorganized sectors. Among this SME’s (Small and Medium scale Enterprises) are huge in numbers, which are supporting our economy. These small scale enterprises are availing for more than 10 years, which are continuing as a cluster based business format. There are several clusters under textile, crackers, statue, lamp, pot, tea, handicraft, poultry are in India, where export are also done in huge which in turn gets a better profit. The SME’s are organized & supported by a separate ministry called “MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES: MSME”. This study, analyse the cluster famous for brass lamp manufacturer called Nachiyar Koil lamp manufacturers business model has been studied. The Lamps are considered as a part of Tamil tradition, which brings the belief of removing the darkness of the soul. These lamps were mostly used by Tamilians not only in Tamilnadu & also by the migrants through out the globe. These lamp manufacturers are supported by our Indian government for their world famous handcrafting.

2. Problem Statement

The Business model of Nachiyar Koil lamp manufacturers comprises their investment, cost of raw material, price range for production, employment opportunities, labor charges, manufacturing, sales, lamp export, profit margin, business survival, business administration system, recycling, borrowings, saving patterns.

The study is about the innovation which states the change in products or services, process and market to achieve a good position in a market and targeted profit.

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The study defines the preference of householders choices towards product\(^1\). Government of India should focus on the policies of infrastructure and improvement of small scale industries and not to diminish the industry\(^2\). Small scale industries face more problems and challenges whenever government brings changes especially on interest rate and other policies which affect the growth of the business\(^3\). The major problem in small scale industry is under-utilization which is caused by lack of demand, non availability of raw materials, etc\(^4\). The government also provide more support to the small scale industry and protect their growth. Creative thinking is also important to deliver the product and to achieve a good position in the market\(^5\). The worker should also have an innovative knowledge. A lengthy working hours in some industries\(^6\) will add negative impact to their worker; providing a safe environment for workers is need of the hour.

### 3. Methodology

The study is based on the primary data collected from 20 lamp manufacturers chosen by means of simple random sampling method from Nachiyar Koil. The data collected has been analyzed by using the correlation and regression analysis with the SPSS software. The variables includes consumption of raw material, investment, employment opportunities, business administration, exporting, Types of transportation, sales & profit margin, borrowings, license, saving pattern, Bank A/C, Insurance policy of Nachiyar Koil lamp manufacturers. The analysis has been given below.

### 4. Data analysis and discussion

#### Table 1. Socio-Economic status of respondents

| Age   | Percentage (%) | Qualification  | Percentage (%) |
|-------|----------------|----------------|----------------|
| <30   | 0              | Secondary      | 55             |
| 30-40 | 20             | Higher Secondary | 40            |
| 40-50 | 25             | U.G.           | 5              |
| >50   | 55             | P.G.           | 0              |
| TOTAL | 100            | TOTAL          | 100            |

The table 1 shows the demographic characteristics of the respondents and percentage analysis. From this it is clearly shown that, 55% of the manufacturers are of the age group of above 50 and most of the lamp manufacturers are Male. Most of the lamp manufacturers are with primary education (55%) and 40% are studied up to higher secondary education.

#### Table 2. Mean and standard deviation for the statements determining the lifestyle of Lamp manufacturers

| Details                        | Percentage | Mean | Standard Deviation |
|--------------------------------|------------|------|--------------------|
| Borrowed loan from a bank      | 15.0       | 1.85000 | 0.36648           |
| Involvement of next generation in business | 45.0       | 1.55000 | 0.51042           |
| Own transport vehicle for your business | 0.00       | 2.00000 | 0.00000           |
| Saving pattern with privates & bank | 25.0       | 1.75000 | 0.44426           |
| Separate bank account for business | 45.0       | 1.55000 | 0.51042           |
| Insurance policy for business  | 0.00       | 2.00000 | 0.00000           |
| Income tax payment             | 100.00     | 1.00000 | 0.00000           |

The table 2 represents that number of manufacturers are not borrowing a loan from a bank. The main reason are, it is considered as a small scale enterprise. So, the loan offered amount is not enough for their weekly expenses. The involvement of the next generation in this business were accepted by 45 percent of manufacturers and majority (55%) are not willing to continue. These lamp manufacturers don't own any transport vehicle for their business purpose, they use only rental transport. Then the 55 percent of manufacturers of did not have any savings account with any bank. Most of the manufacturers are not having any insurance policy for their business. But they were all income taxpayers.

The table 3 shows about the business administration model of lamp manufacturers. The raw material required to produce 100, 1 foot size lamps consumes about 250-300 kg of brass. If the business were started by their...
parents, they are learning this art from them, if not they were learning from outsiders and relatives. Second generation manufacturer not from any institutes or centers. 90 percent of manufacturers provide job opportunity, to the local people and remaining 10 percent to their relatives & family members.

**Table 3.** Mean and standard deviation for statements determining business analysis of lamp manufacturers.

| Particulars                        | Percentage | Mean   | Standard Deviation |
|------------------------------------|------------|--------|--------------------|
| Raw material for 100,1 feet lamp   | 50         | 2.4500 | 0.60481            |
| Learning this art                  | 60         | 1.4500 | 0.60481            |
| Employment opportunity             | 90         | 1.1000 | 0.30779            |
| No. of labors working              | 65         | 2.7000 | 0.65695            |
| Time taken to finish 100 products  | 100        | 4.0000 | 0.00000            |
| Partnership business               | 10         | 1.9000 | 0.30779            |
| Lamps Exported to places           | 55         | 2.2500 | 1.48235            |
| Transportation for product dispatch| 60         | 2.4000 | 1.04630            |
| Diversification of business        | 40         | 1.6000 | 0.50262            |

There are 10-20 labors working under each manufacturer, but they are not permanent workers they work in rotation among 2 or more industry. In a day they are able to produce 120 final lamps. Most of the lamp manufacturing businesses are not done by partnership but as a sole trader. Some of the manufacturers are exporting lamps to other Asian countries, but their annual export is less than 5 percent. For lamp dispatching, load vans in rental basis are highly preferred by the manufacturer. Most of the manufacturer’s are engaged in farming, jewels manufacturing business, etc., other than lamp manufacturing.

The table 4 shows that lamp manufacturers are engaged in manufacturing some other brass products like pots, statues. Recycling of lamp is done by all the manufacturers. The annual sales range (as per IT) is about 7-15 Lakhs per annum, some of the manufactures sales range is above 30 Lakhs as they were producing large size & new design lamps. Their profit margin (as per IT) is about 3-7 Lakhs. They were not using any new machines for higher design & production. The monthly electricity bill is about 3000-5000. This lamp manufacturing requires a license and all the manufacturer are having it. And they are all aware about the Geographical Indication (GI) tag, which is a special Intellectual property of Nachiyar koil lamp manufacturer’s.

**Table 4.** Mean and standard deviation for statements determining the business growth opportunity of Nachiyar koil lamp manufacturers.

| Particulars                        | Percentage | Mean   | Standard Deviation |
|------------------------------------|------------|--------|--------------------|
| Various products manufactured      | 60         | 1.9000 | 1.29371            |
| Recyling of the lamp               | 100        | 1.0000 | 0.00000            |
| Annual sales range (as per IT)     | 50         | 3.3000 | 0.86450            |
| Profit margin (as per IT)          | 90         | 4.1000 | 0.30779            |
| Usage of new machines              | 0          | 2.0000 | 0.00000            |
| Monthly EB charge                  | 85         | 1.8500 | 0.36635            |
| Legal license & clearances         | 100        | 1.0000 | 0.00000            |
| Awareness of GI tag                | 100        | 1.0000 | 0.00000            |

**Table 5.** Correlation between Age Vs lifestyle, business pattern & product groups

| Manifest variables | R       | Sig. (2 tailed) | Relationship |
|--------------------|---------|----------------|--------------|
| Age Vs Life Style  | -.559   | .010           | Negative     |
| Age Vs Business model | -.120   | .616           | Negative     |
| Age Vs Growth opportunities | -.108 | .649 | Negative |

In the table 5, correlation was done for age of the nachiyar koil lamp manufacturers lifestyle, business model and groups. There was a negative correlation between age and lifestyle (r=-0.559), Business group (r=-0.120), prod-
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uct groups (r = -0.108). So, it is concluded that age of the nachiyar koil lamp manufacturers does not related the lifestyle, Business group and product groups.

In the table 6, R value indicate the correlation coefficient. R can be contemplated to determine the prediction of lifestyle, Business pattern & product groups with age. The R square is the coefficient of determination which has the capacity of variation assumed for by the recursion. From the R square value it is calculated that 31.2% of Nachiyar koil lamp manufacturer’s age influence lifestyle of lamp manufacturers. The model is also significant with F value = 8.180 (sig = 0.10). Business model (12.0%) and growth opportunities (0.8%) are impacted by the age of nachiyar koil lamp manufacturer’s.

Table 6. Regression

| Particulars       | R     | R Square | Adjusted R square | Unstandardized coefficient B | F     | Sig.  |
|-------------------|-------|----------|-------------------|------------------------------|-------|-------|
| Life Style        | 0.559 | 0.312    | 0.274             | -0.709                       | 8.180 | 0.010 |
| Business model    | 0.120 | 0.014    | -0.040            | -0.235                       | 0.261 | 0.616 |
| Growth opportunities | 0.108 | 0.012    | -0.043            | -0.163                       | 0.214 | 0.649 |

5. Major Finding

The analyzed data shows that the large sized lamp manufacturers have earning high and they have some indirect foreign exporters. But, the export annual range is less than 7%. And the lamp manufacturing business is considered as a small scale business. But, where some manufacturers have an annual sales more than 70 lakhs, which is wrongly presented for payment of income tax.

6. Conclusion

The study of Nachiyar Koil lamp manufacturers business model, lifestyle, business group confirms that it is an art of Thanjavur district, but it is losing its importance due to similar product produced in Delhi at lower cost & Quality. Due to this issue the demand on Nachiyar Koil lamp is getting declined. But Nachiyar Koil has Geographical Indication (GI). So the business can be carried out only in Nachiyar Koil. If the government supported them with market hub, export hub and incubation for small entrepreneur’s to safeguard the life of 300 manufacturers who are involved in this business. And the next generation manufacturers can be involved in this business, which makes in Nachiyar Koil as a place for unique entrepreneur. The Nachiyar Koil many clusters are in the state of Tamilnadu, it also supports the economical growth of the state in limited.

7. References

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