CHAPTER – IX

PERFORMANCE INDEX FOR EVALUATION OF SELECTED FRANCHISE BUSINESS
9.1 INTRODUCTION

Every business that operates in the market needs to be evaluated for its performance.

Performance evaluation of a business unit may have multiple dimensions. Performance can be
measured based on the profitability, human efficiency, customer satisfaction, market leadership, social contributions, etc. Business performance measures are a systematic set of quantified predetermined standards and adopted or developed from various sources. These measures allow the management to keep a track of business performance and access its current status. They are the control indicators that guide and gauge the operations of business by constantly providing up-to-date information about the compliance with the requirements of efforts to achieve the targets.

Business dictionary defines performance as the accomplishment of a given task that is measured against predefined standards. These standards against which the performance is measured may be the level of accuracy, completeness, cost, speed, etc. of performing the given activity. Business performance measures as a word is also synonymously used as ‘organizational performance’ or ‘key success indicators’. Business performance needs to be measured so that the owners and other stakeholders can track performance of the business operations from time to time.

Some of the tools of business performance measures are as under:

1) Budget

2) Key performance indicators (KPI).

3) The balanced scorecard.
4) Benchmark.

5) Six sigma.

6) CRM (Customer Relationship Management)

7) Individual performance appraisal.

8) Customer satisfaction level.

9.2 SIGNIFICANCE OF MEASURING PERFORMANCE OF THE BUSINESS

Setting an appropriate target of performance and measuring that against the actual achievements is an important activity for the progress of any business unit. It is valuable to know how the various areas in a particular business are operating. It enables the management to be aware of all the key issues in business and allows to proactively managing the operations.

Performance measurement indicates the key areas that need to be focused on and which determine the overall business success. This makes the Performance Index of the business a powerful tool of management.

Performance measure of a business varies from sector to sector, industry to industry and business to business. Therefore, performance index developed in order to measure the performance of any
business needs to be tailor made to suit the needs, requirements and nature of that respective business. Measurement of performance may be in regards to financial as well as non-financial areas of operations. Measuring the financial performance is easier than measuring the customer related issues. For measuring the financial performance of the business one can rely on profitability, revenue, returns on investment, cash flow, etc. whereas, non financial measurement of performance which deals with customer perspectives, has to depend on the customer feedback only, as a key source.

Once the key areas have been identified which need to be measured in business, one need to decide upon the ways to measure them. Various criteria need to be considered in developing a business key performance indicator (KPI). KPI are the significant components of a performance measurement index. For instance,

- Sales accounted by retaining customers.
- Number of customer complaints received.
- Number of items returned by the customers, etc.

The requirements for the selection of the KPI for developing a Performance Index are as follows:

1) The key criteria should be closely linked with the top level goals of the business and the subject of evaluation.
2) The KPI needs to be quantifiable. If the key indicator cannot be expressed in terms of number, it cannot contribute in measuring performance.

3) The KPI should be a part of an element from the controllable environment of the business.

A number of studies that are done in the past have determined a link between customer perception, customer satisfaction and customer retention. This makes it mandatory for the seller to consider the customer satisfaction as an important element that reflects their competitive performance in the market. Based on the customer satisfaction level, the company’s performance can be evaluated. Thus, one of the measures which is reliable source of evaluating the performance of any business may be the performance index based on customer feedback which is also known as Customer Satisfaction Index (CSI).

**9.3 CUSTOMER SATISFACTION INDEX (CSI)**

Evaluation of business through Customer Satisfaction Index (CSI) and thereby Improvement of customer satisfaction has been a major area of research since long. The American Customer Satisfaction Index (ACSI) which was developed and published in the year 1994 by researchers at the University of Michigan was the first of its kind which measured the customer satisfaction on use of products/services through customer surveys. This formed the base model for many countries to go for development of Industry-wise customer satisfaction index. The European customer satisfaction Index (ECSI), the Swiss index of customer satisfaction (SWICS), the Canadian customer satisfaction index (CCSI) are some of the customer satisfaction indices
developed by respective countries and adopted by various business units to evaluate their operations from customer point of opinions.

India also has developed a customer satisfaction index namely Indian Customer Satisfaction Index (ICSI) which is based on ACSI methodology. These measurements enable all the organizations and companies in respective countries to benchmark the various aspects of customers’ experiences and provide an opportunity to the business units to evaluate their performance as far as meeting their customers’ expectations.

9.4 PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS

The franchise business community, just like any other business community, needs to measure the outcomes in franchising so as to understand the brand’s performance.

Measuring outcome is an essential step in evaluation of franchise business performance. It becomes essential to grade a franchise business as good, average or bad in order to judge the success, growth and potentials of a given franchise business and the concerned industry.

There are various financial measures used by the franchise evaluators in order to judge the performance of franchise units. For instance, the lenders may use financial measures such as profitability, sales turnover, return on capital invested, etc. in order to evaluate the performance
of franchise business. Prospective franchisee may consider evaluating the brand performance before making a franchise buy decision and judging the franchisor’s business performance on particular grounds.

Although ICSI enables the businesses of all types to evaluate their customer satisfaction in India, there is no specific measure yet developed for evaluation of customer satisfaction specifically in franchise business units that would also evaluate the performance of the units. However, a separate measure has been made available by The Franchise Association of India for measuring the franchisee satisfaction with the franchisor’s brand.

The present empirical study makes an attempt to develop a systematic franchise performance index based on customer satisfaction for five selected industrial sectors. This performance index would be helpful in grading the performance of individual franchise units operating within the specific industrial sectors.

The attempt to develop the Performance Index as the final objective of the study has been made at two levels. The Performance Index thus, is developed on the basis of:

1. Statistical calculations
2. Programming in Turbo C++
9.5 STATISTICAL CALCULATIONS: PROCEDURE IN THE DEVELOPMENT OF PERFORMANCE INDEX FOR SELECTED FRANCHISE INDUSTRIES

The present empirical work completely relies on the customer survey for the study of objective six. Objective six is aimed at developing a systematic performance index in order to evaluate the performance of selected franchise business units in five selected industrial sectors. The data collected from a sample of 1000 customers has been used as a base to develop a systematic index of performance evaluation of franchise units.

Following systematic procedure has been adopted in order to develop the said performance index based on customer satisfaction.

1. **Determine the Standards of Performance**: For the present study, the researcher has used the grading scale in order to collect the response from the customers in regards to their satisfaction level with the selected franchise unit. The selected customers were directed to provide a score on different parameters from a number of 1 to 10 where 1 is the least score reflecting a lowest level of satisfaction and 10 is the highest score reflecting a highest level of satisfaction of the customers. This scale has been further considered by the researcher in order to set a benchmark for evaluating the performance of the selected franchise units. The score range of 01 to 10, is divided into 5 categories and the performance standards have been set for evaluation of the concerned franchise unit as under:

   i. Average weighted score of 00 – 02 will be graded as Below satisfactory performance

   ii. Average weighted score of 02 – 04 will be graded as Satisfactory performance

   iii. Average weighted score of 04 – 06 will be graded as Good performance
iv. Average weighted score of 06 – 08 will be graded as Very good performance

v. Average weighted score of 08 – 10 will be graded as Outstanding performance

In all the above cases the lower limit of the range should be treated as exclusive.

2. Identify the Parameters of Customer Satisfaction: For any performance index to be developed, it requires certain parameters to be identified. For the present study parameters are the criteria against which customer satisfaction has been measured with the help of grading scale of 1 to 10. For each selected franchise industry, the customer satisfaction measurement parameters differ as per their relevance and suitability to the concerned industry. However, the researcher has considered ten parameters that measure the customer satisfaction in each of the selected franchise industries and these are used for developing the respective performance index.

3. Allocate Weights to the Parameters: The selected parameters measuring the customer satisfaction are not of an equal importance; therefore, it is mandatory to assign weights to these parameters. The weights may be assigned based on the importance to be given or priority to be given to the parameters. For instance, the most important criterion may be given weight as 10 and then assign weights to the other parameters as per the level of importance or their contribution. For the present study, the researcher has allocated weights to each of the parameters in a descending order of importance where the importance of the parameter has been decided based on the average scores obtained for each of the selected
parameters through the customer survey. These mean/average scores are shown in Table No. 9.1 to 9.5. The parameter is weighed highest as 10 if it’s obtained mean is highest and the parameter is weighed lowest if it’s obtained mean is found to be lowest. Thus, all the ten parameters are weighed in a descending order from 10 to 01 as per the highest to lowest mean scores respectively.

4. **Regression Weights (Weighing Based on Average of 1)**: Once the initial weights based on importance are allocated to each criterion, the regression weights (weighing based on average of 1) have to be calculated against each of the criterion involved in the index as under:

\[ W_{A_{1-10}} = \frac{I}{\sum I} \]

where,

- \( W_{A_{1-10}} \) is Weight (average of 1) for the first parameter to the tenth parameter,
- \( I \) is the initial weight assigned to the respective parameter,
- \( \sum I \) is total sum of all the initial weights assigned to respective parameters and
- ‘\( n \)’ is total number of parameters used.

The calculation of weighing based on average of 1 for the performance index of selected franchise industries has been shown in the Table No. 9.1 to 9.5.

5. **Locate the Feedback / Scores Given by Customers**: The feedback from customers has to be collected and located against the respective parameters. This feedback needs to be in the form of grade scale provided to the customers and should be on par with their satisfaction
level with the given franchise unit against the specified parameters. The score given by the customers has to be within the range of 1 to 10 where, 1 indicates the least satisfaction level and 10 indicate the highest one.

6. **Calculate Weighted Scores**\(^{10}\): The scores obtained through the customer feedback have to be multiplied with the calculated weighing based on average of \(1(WA_{1-10})\). Following formula can be adopted for calculating the average:

\[
WS_{1-10} = (S_{1-10}) \times (WA_{1-10}) \text{ where,}
\]

\(WS_{1-10}\) is weighted scores of parameter 1 to 10,

\(S_{1-10}\) is scores given by the customers as feedback against each respective parameter and

\(WA_{1-10}\) is weight based on average of 1 for the respective parameter.

7. **Calculate Performance Index**\(^{11}\): Weights calculated based on average of 1 against each of the parameters after multiplying with the customer feedback scores are summed and an average of all the values is calculated. This average is the deciding factor for evaluating the performance of a selected franchise unit. Following formula can be adopted for finding the average which is the performance index for evaluation of franchise business:

\[
PI = \frac{\sum WS}{n} \text{ where,}
\]

\(PI\) is the performance index for evaluating franchise business performance,
\[ \sum WS \] is the sum of all the weighted scores and 

\( n \) is the number of parameters in the performance index.

8. **Evaluate the Performance against the Predetermined Standards of Performance\(^{12}\):** The PI value calculated as per above step acts as the deciding factor for evaluating the performance of a selected franchise unit. This value will be within the limits of the grading scale given to the customers for providing the feedback on the ten selected parameters included in the calculation of the performance index of respective franchise industries. The obtained value has to be compared with the predetermined standards of performance in order to evaluate the actual performance of the franchise business. The franchise performance evaluation criteria considered for the study are as under:

- If the average weighted score ranges from 0 to 2 - the performance of the respective franchise business unit is marked as ‘Below satisfactory’.
- If the average weighted score ranges from 2 to 4 - the performance of the respective franchise business unit is marked as ‘Satisfactory’.
- If the average weighted score ranges from 4 to 6 - the performance of the respective franchise business unit is marked as ‘Good’.
- If the average weighted score ranges from 6 to 8 - the performance of the respective franchise business unit is marked as ‘Very good’.
- If the average weighted score ranges from 8 to 10 - the performance of the respective franchise business unit is marked as ‘Outstanding’.

In all the above cases the lower limit of the range should be treated as
9.5.1 PROFORMA OF STATISTICAL CALCULATION OF PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS – INDUSTRY WISE

Following Table Nos. 9.1 to 9.5 provide the proforma of performance index developed for the selected industries of franchise business. Each table shows ten parameters that are used in calculating the performance index in a selected industry of franchise business. These parameters are selected based on their suitability and genuineness to the nature of respective franchise industry.

The parameters have been given initial weights/priorities based on the mean calculated from respondents’ feedback in the survey conducted to study objective five of this empirical research. From the initial weights, the weights based on average of 1 are calculated with the help of formula discussed in point number 4 of section 9.5 of this chapter and is denoted as ‘WA1-10’ in the specimen. In the Table No. 9.1 to 9.5, the column titled ‘score’ denoted as ‘S1-10’ is unfilled since the individual customer feedback on the given parameters needs to be considered in the calculation. These scores given by the customers based on their experience and satisfaction are to be multiplied to the respective weights (based on average of 1) and weighted scores are to be calculated further denoted as ‘WS1-10’.

Finally, the values in the last column of the tables need to be totalled and an average of these values is to be calculated which is the performance index denoted as ‘PI’. This PI value is the...
deciding factor in the evaluation of franchise business which is compared against the predetermined standards of performance.

**Table No. 9.1**

**Proforma of Statistical Calculation of Performance Index for Evaluation of Food and Beverage Franchise Units**

<table>
<thead>
<tr>
<th>SR. NO.</th>
<th>PARAMETERS</th>
<th>MEAN</th>
<th>INITIAL WEIGHTS</th>
<th>WA1-10</th>
<th>S1-10</th>
<th>WS1-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ambiance of store</td>
<td>8.51</td>
<td>10</td>
<td>1.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hygiene</td>
<td>8.43</td>
<td>9</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Brand image</td>
<td>8.34</td>
<td>8</td>
<td>1.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Quality of food</td>
<td>8.07</td>
<td>7</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Payment option</td>
<td>8.04</td>
<td>6</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Service quality</td>
<td>8.03</td>
<td>5</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Presentation of food</td>
<td>7.97</td>
<td>4</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Quantity provided</td>
<td>7.57</td>
<td>3</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Returns policy</td>
<td>7.29</td>
<td>2</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Price affordability</td>
<td>6.73</td>
<td>1</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Weights Allocated**

| 55 | PI |

**Regression Weights Calculated (Average Of 01) = Weights * (Sum Of Weights ÷ Number Of Parameters)**

Source: Computed from primary data
Table No. 9.2

Proforma of Statistical Calculation of Performance Index for Evaluation of Consumer Goods Franchise Units

<table>
<thead>
<tr>
<th>SR. NO.</th>
<th>PARAMETERS</th>
<th>MEAN</th>
<th>INITIAL WEIGHTS</th>
<th>WA1-10</th>
<th>S1-10</th>
<th>WS1-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cleanliness of the store</td>
<td>8.38</td>
<td>10</td>
<td>1.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Quality of the goods</td>
<td>8.34</td>
<td>9</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Interiors of the store</td>
<td>8.33</td>
<td>8</td>
<td>1.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Employee knowledge</td>
<td>8.28</td>
<td>7</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Brand image</td>
<td>8.26</td>
<td>6</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Uniqueness of design</td>
<td>8.25</td>
<td>5</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Display factor</td>
<td>8.21</td>
<td>4</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Variety of goods</td>
<td>8.05</td>
<td>3</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Customer care</td>
<td>8.00</td>
<td>2</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Price affordability</td>
<td>7.23</td>
<td>1</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Weights Allocated</td>
<td></td>
<td></td>
<td>55</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regression Weights Calculated (Average Of 01) = Weights * (Sum Of Weights ÷ Number Of Parameters)

Source: Computed from primary data
Table No. 9.3

Proforma of Statistical Calculation of Performance Index for Evaluation of Franchise Health, Wellness, Beauty and other selected service Units

<table>
<thead>
<tr>
<th>SR. NO.</th>
<th>PARAMETERS</th>
<th>MEAN</th>
<th>INITIAL WEIGHTS</th>
<th>WA_{1-10}</th>
<th>S_{1-10}</th>
<th>WS_{1-10}</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Service quality</td>
<td>8.35</td>
<td>10</td>
<td>1.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Brand image</td>
<td>8.29</td>
<td>9</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Standardization</td>
<td>8.27</td>
<td>8</td>
<td>1.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Interiors</td>
<td>8.25</td>
<td>7</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Specialization</td>
<td>8.24</td>
<td>6</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Expertise of staff</td>
<td>8.18</td>
<td>5</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Availability of service</td>
<td>8.11</td>
<td>4</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Customer care</td>
<td>7.94</td>
<td>3</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Payment option</td>
<td>7.93</td>
<td>2</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Price affordability</td>
<td>7.36</td>
<td>1</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total Weights Allocated</th>
<th>55</th>
</tr>
</thead>
</table>

Weights Calculated (Average Of 01) = Weights * (Sum Of Weights ÷ Number Of Parameters)

Source: Computed from primary data
Table No. 9.4

Proforma of Statistical Calculation of Performance Index for Evaluation of Franchise Hotel

<table>
<thead>
<tr>
<th>SR. NO.</th>
<th>PARAMETERS</th>
<th>MEAN</th>
<th>INITIAL WEIGHTS</th>
<th>WA_{1-10}</th>
<th>S_{1-10}</th>
<th>WS_{1-10}</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality of room service</td>
<td>8.50</td>
<td>10</td>
<td>1.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Staff approach</td>
<td>8.46</td>
<td>9</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Daily cleanliness</td>
<td>8.43</td>
<td>8</td>
<td>1.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Standardization</td>
<td>8.38</td>
<td>7</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Perfection in billing</td>
<td>8.28</td>
<td>6</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Brand image</td>
<td>8.26</td>
<td>5</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Payment options</td>
<td>8.25</td>
<td>4</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Approach of staff</td>
<td>8.21</td>
<td>3</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ease of reservation</td>
<td>8.19</td>
<td>2</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Price affordability</td>
<td>7.37</td>
<td>1</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Weights Allocated | 55 |

Weights Calculated (Average Of 01) = Weights \times (\text{Sum Of Weights} / \text{Number Of Parameters})

Source: Computed from primary data
Table No. 9.5

Proforma of Statistical Calculation of Performance Index for Evaluation of Franchise Units In Education

<table>
<thead>
<tr>
<th>SR. NO.</th>
<th>PARAMETERS</th>
<th>MEAN</th>
<th>INITIAL WEIGHTS</th>
<th>WA_{1-10}</th>
<th>S_{1-10}</th>
<th>WS_{1-10}</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Brand image</td>
<td>8.26</td>
<td>10</td>
<td>1.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Professionalism of staff</td>
<td>8.25</td>
<td>9</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Teaching quality</td>
<td>8.20</td>
<td>8</td>
<td>1.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Interiors</td>
<td>8.11</td>
<td>7</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Physical facilities</td>
<td>8.10</td>
<td>6</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Standardization</td>
<td>8.09</td>
<td>5</td>
<td>0.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Teaching methods used</td>
<td>8.03</td>
<td>4</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Uniqueness</td>
<td>8.02</td>
<td>3</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Grievance mechanism</td>
<td>7.74</td>
<td>2</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Price affordability</td>
<td>7.24</td>
<td>1</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Weights Allocated | 55 | PI

Weights Calculated (Average Of 01) = Weights \times (\text{Sum Of Weights} \div \text{Number Of Parameters})

Source: computed from primary data
9.6 PROGRAMMING IN TURBO C++ FOR DEVELOPING A PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS UNITS

Turbo C was a software development tool which was developed in the year 1987 and was used for writing programs in C language. Eventually Turbo C was updated to the version called Turbo C++. It is one of the ‘most in demand’ programming languages in the current century. Programming language is a formal language using certain instructions in order to derive specific output. It usually provides a set of instructions for a computer to implement some specific algorithms. Algorithm refers to a set of formulas or mathematical instructions used to solve certain mathematical/logical/reasoning problems.

In the present chapter of this study, an attempt has been made by the researcher to develop a programme using Turbo C++ which would make it practically possible to evaluate the performance of the given franchise business unit operating under the selected industries. The programme that has been developed, practically implements the performance index discussed in section 9.5 and 9.6. The individual customer feedback on all the parameters measuring the satisfaction is taken as an input of the programme and calculated index provides the performance grades of the respective franchise unit under evaluation. This programme provides an instant report as to how the selected franchise unit performs based on the customer satisfaction feedback. The franchise unit to be evaluated will be graded as ‘below satisfactory’, ‘satisfactory’, ‘good’, ‘excellent’ or ‘outstanding’ as per their performance. Every step discussed in the
development of performance index for evaluating franchise business has been systematically included while processing the programme in the code. The programme has been developed using a code which is also provided in the chapter.

Below given are the programmes designed by the researcher using Turbo C++ in order to evaluate the performance of selected franchisee units based on the customer satisfaction. The programme will evaluate the performance of the selected franchisee unit each time the particular customer provides the feedback with regards to the level of their satisfaction based on certain parameters. Following are the programmes designed for the same.

9.6.1 PROGRAMMING IN TURBO C++ FOR DEVELOPING A PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS UNITS IN FOOD AND BEVERAGE INDUSTRY

Below given is the programme designed using Turbo C++ for developing a performance index for evaluation of franchise business units in food and beverage industry.
#include<stdio.h>
#include<conio.h>

int main()
{
    float avg,wt1,wt2,wt3,wt4,wt5,wt6,wt7,wt8,wt9,wt10,a,q,p,po,pr,sq,b,r,qty;
    clrscr();

    printf(" Performance Evaluation of the Franchise Food and Beverage unit\n");
    printf(" 
");
    printf("Kindly grade the following parameters based on your experience\n");
    printf(" 1 being the least grade & 10 being the highest\n");
    printf("\n");
    printf(" 1 Ambiance -------- ");
    scanf("%f",&a);
    wt1=a*1.82;
    printf(" 2 Hygiene -------- ");
    scanf("%f",&h);
    wt2=h*1.64;
    printf(" 3 Brand Image -------- ");
    scanf("%f",&b);
    wt3=b*1.46;
    printf(" 4 Quality of Food -------- ");
    scanf("%f",&q);
    wt4=q*1.27;
    printf(" 5 Payment Option -------- ");
scanf("%f", &po);
wt5 = po * 1.09;
printf(" 6 Service Quality -------- ");
scanf("%f", &sq);
wt6 = sq * 0.9;
printf(" 7 Presentation -------- ");
scanf("%f", &p);
wt7 = p * 0.73;
printf(" 8 Price -------- ");
scanf("%f", &pr);
wt8 = pr * 0.55;
printf(" 9 Quantity -------- ");
scanf("%f", &qty);
wt9 = qty * 0.36;
printf("10 Returns Policy -------- ");
scanf("%f", &r);
wt10 = r * 0.18;
avg = (wt1 + wt2 + wt3 + wt4 + wt5 + wt6 + wt7 + wt8 + wt9 + wt10) / 10;
printf("\n");
printf("weighted average performance Grade of the franchise unit %.2f ---- \n", avg);
printf("\n");
printf("Performance Grade of the franchise unit ---- ");
if(avg >= 0.0 && avg <= 2.0)
printf("Below Satisfactory\n");
else if(avg > 2.0 && avg <= 4.0)
printf("Satisfactory\n");
else if(avg>4.0 && avg<=6.0)
printf("Good\n");
else if(avg>6.0 && avg<=8.0)
printf("Very Good\n");
else
printf("Outstanding Performance\n");
getch();
return 0;
}

9.6.2 PROGRAMMING IN TURBO C++ FOR DEVELOPING A PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS UNITS IN CONSUMER GOODS INDUSTRY

Below given is the programme designed using Turbo C++ for developing a performance index for evaluation of franchise business units in consumer goods industry.

#include<stdio.h>
#include<conio.h>
int main()
{
    float avg, wt1, wt2, wt3, wt4, wt5, wt6, wt7, wt8, wt9, wt10, a, q, p, po, pr, sq, b, r, h, qty;
    clrscr();
    printf(" Performance Evaluation of the Franchise Consumer Goods unit\n");
    printf("\n");
    printf("Kindly grade the following parameters based on your experience\n");
    printf("1 being the least grade & 10 being the highest\n");
    printf("\n");
    printf(" 1 Cleanliness of store -------- ");
    scanf("%f", &a);
    wt1 = a * 1.82;
    printf(" 2 Quality of Goods -------- ");
    scanf("%f", &h);
    wt2 = h * 1.64;
    printf(" 3 Interiors -------- ");
    scanf("%f", &b);
    wt3 = b * 1.46;
    printf(" 4 Employee Knowledge -------- ");
    scanf("%f", &q);
    wt4 = q * 1.27;
    printf(" 5 Brand Image -------- ");
    scanf("%f", &po);
    wt5 = po * 1.09;
    printf(" 6 Uniqueness of design -------- ");
}
scanf("%f", &sq);
wt6 = sq * 0.9;
printf(" 7 Display Factor -------- ");
scanf("%f", &p);
wt7 = p * 0.73;
printf(" 8 Variety of Goods -------- ");
scanf("%f", &pr);
wt8 = pr * 0.55;
printf(" 9 Customer Care -------- ");
scanf("%f", &qty);
wt9 = qty * 0.36;
printf(" 10 Payment Option -------- ");
scanf("%f", &r);
wt10 = r * 0.18;
avg = (wt1 + wt2 + wt3 + wt4 + wt5 + wt6 + wt7 + wt8 + wt9 + wt10) / 10;
printf("\n");
printf("weighted average performance Grade of the franchise unit %.2f ---- \n", avg);
printf("\n");
printf("Performance Grade of the franchise unit ---- ");
if(avg >= 0.0 && avg <= 2.0)
printf("Below Satisfactory\n");
else if(avg > 2.0 && avg <= 4.0)
printf("Satisfactory\n");
else if(avg > 4.0 && avg <= 6.0)
printf("Good\n");
else if(avg>6.0 && avg<=8.0)
printf("Very Good\n");
else
printf("Outstanding Performance\n");
getch();
return 0;
}

9.6.3 PROGRAMMING IN TURBO C++ FOR DEVELOPING A PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS UNITS IN HEALTH, WELLNESS, BEAUTY AND OTHER SERVICE INDUSTRY

Below given is the programme designed using Turbo C++ for developing a performance index for evaluation of franchise business units in health, wellness, beauty and other service industry.

#include<stdio.h>
#include<conio.h>
int main()
{
float avg,wt1,wt2,wt3,wt4,wt5,wt6,wt7,wt8,wt9,wt10,a,q,p,po,pr,sq,b,r,qty;
clrscr();

printf(" Performance Evaluation of the Franchise Consumer Services unit\n");
printf(" \n");
printf("Kindly grade the following parameters based on your experience\n");
printf ("1 being the least grade & 10 being the highest\n");
printf("\n");

printf(" 1 Service Quality -------- ");
scanf("%f",&a);
wt1=a*1.82;

printf(" 2 Brand Image -------- ");
scanf("%f",&h);
wt2=h*1.64;

printf(" 3 Standardisation -------- ");
scanf("%f",&b);
wt3=b*1.46;

printf(" 4 Interiors -------- ");
scanf("%f",&q);
wt4=q*1.27;

printf(" 5 Specialisation -------- ");
scanf("%f",&po);
wt5=po*1.09;

printf(" 6 Expertise of Staff -------- ");
scanf("%f",&sq);
wt6=sq*0.9;

printf(" 7 Availability of Demanded Service -------- ");
scanf("%f", &p);
wt7 = p * 0.73;
printf(" 8 Customer Care ------- ");
scanf("%f", &pr);
wt8 = pr * 0.55;
printf(" 9 Payment Option ------- ");
scanf("%f", &qty);
wt9 = qty * 0.36;
printf("10 Convenience of Store ------- ");
scanf("%f", &r);
wt10 = r * 0.18;
avg = (wt1 + wt2 + wt3 + wt4 + wt5 + wt6 + wt7 + wt8 + wt9 + wt10) / 10;
printf("\n");
printf("weighted average performance Grade of the franchise unit %.2f ---- \n", avg);
printf("\n");
printf("Performance Grade of the franchise unit ---- ");
if (avg >= 0.0 && avg <= 2.0)
printf("Below Satisfactory\n");
else if (avg > 2.0 && avg <= 4.0)
printf("Satisfactory\n");
else if (avg > 4.0 && avg <= 6.0)
printf("Good\n");
else if (avg > 6.0 && avg <= 8.0)
printf("Very Good\n");
else
9.6.4 PROGRAMMING IN TURBO C++ FOR DEVELOPING A PERFORMANCE INDEX FOR EVALUATION OF FRANCHISE BUSINESS UNITS IN HOTEL INDUSTRY

Below given is the programme designed using Turbo C++ for developing a performance index for evaluation of franchise business units in hotel industry.

#include<stdio.h>
#include<conio.h>

int main()
{
float avg,wt1,wt2,wt3,wt4,wt5,wt6,wt7,wt8,wt9,wt10,a,q,p,po,pr,sq,b,r,h,qty;
clrscr();
printf(" Performance Evaluation of the Franchise hotels\n");
printf(" \
");
printf("Kindly grade the following parameters based on your experience\n");
printf ("1 being the least grade & 10 being the highest\n");
printf("\n");
printf(" 1 Quality of Room Service -------- ");
scanf("%f",&a);
wt1=a*1.82;
printf(" 2 Staff Approach --------");
scanf("%f",&h);
wt2=h*1.64;
printf(" 3 Daily Cleanliness -------- ");
scanf("%f",&b);
wt3=b*1.46;
printf(" 4 Standardisation -------- ");
scanf("%f",&q);
wt4=q*1.27;
printf(" 5 Perfection in Billing -------- ");
scanf("%f",&po);
wt5=po*1.09;
printf(" 6 Brand Image -------- ");
scanf("%f",&sq);
wt6=sq*0.9;
printf(" 7 Payment Option -------- ");
scanf("%f",&p);
wt7=p*0.73;
printf(" 8 Approach of Staff -------- ");
scanf("%f",&pr);
wt8 = pr * 0.55;

printf("9 Ease of Reservation ------- ");

scanf("%f", &qty);

wt9 = qty * 0.36;

printf("10 Customer Care ------- ");

scanf("%f", &r);

wt10 = r * 0.18;

avg = (wt1 + wt2 + wt3 + wt4 + wt5 + wt6 + wt7 + wt8 + wt9 + wt10) / 10;

printf("\n");

printf("weighted average performance Grade of the franchise unit %.2f ---- \n", avg);

printf("\n");

printf("Performance Grade of the franchise unit ---- ");

if(avg >= 0.0 && avg <= 2.0)
    printf("Below Satisfactory\n");
else if(avg > 2.0 && avg <= 4.0)
    printf("Satisfactory\n");
else if(avg > 4.0 && avg <= 6.0)
    printf("Good\n");
else if(avg > 6.0 && avg <= 8.0)
    printf("Very Good\n");
else
    printf("Outstanding Performance\n");

getch();

return 0;
Below given is the programme designed using Turbo C++ for developing a performance index for evaluation of franchise business units in education sector.

```c
#include<stdio.h>
#include<conio.h>

int main()
{
    float avg,wt1,wt2,wt3,wt4,wt5,wt6,wt7,wt8,wt9,wt10,a,q,po,pr,sq,b,r,qty;
    clrscr();
    printf(" Performance Evaluation of the Franchise Education Sector unit\n");
    printf(" \\
");
    printf(" Kindly grade the following parameters based on your experience\n");
    printf(" 1 being the least grade & 10 being the highest\n");
    printf("\n");
    printf(" 1 Brand Image -------- ");
```
```c
scanf("%f",&a);
wt1=a*1.82;

printf(" 2 Professionalism of Staff -------- ");
scanf("%f",&h);
wt2=h*1.64;

printf(" 3 Teaching Quality -------- ");
scanf("%f",&b);
wt3=b*1.46;

printf(" 4 Interiors -------- ");
scanf("%f",&q);
wt4=q*1.27;

printf(" 5 Physical facilities -------- ");
scanf("%f",&po);
wt5=po*1.09;

printf(" 6 Standardisation -------- ");
scanf("%f",&sq);
wt6=sq*0.9;

printf(" 7 Teaching Methods Used -------- ");
scanf("%f",&p);
wt7=p*0.73;

printf(" 8 Uniqueness -------- ");
scanf("%f",&pr);
wt8=pr*0.55;

printf(" 9 Grievance Mechanism -------- ");
scanf("%f",&qty);
```
wt9=qty*0.36;

printf("10 Price Affordability ------- ");

scanf("%f",&r);

wt10=r*0.18;

avg=(wt1+wt2+wt3+wt4+wt5+wt6+wt7+wt8+wt9+wt10)/10;

printf("\n");

printf("weighted average performance Grade of the franchise unit %.2f ---- \n",avg);

printf("\n");

printf("Performance Grade of the franchise unit ---- ");

if(avg>=0.0 && avg<=2.0)
    printf("Below Satisfactory\n");
else if(avg>2.0 && avg<=4.0)
    printf("Satisfactory\n");
else if(avg>4.0 && avg<=6.0)
    printf("Good\n");
else if(avg>6.0 && avg<=8.0)
    printf("Very Good\n");
else
    printf("Outstanding Performance\n");

getch();
return 0;
}
9.7 PERFORMANCE EVALUATION OF SELECTED FRANCHISEE UNITS – OUTPUT OF PROGRAMMING IN TURBO C++

Programmes as shown in section 9.7 above are practically used to evaluate the performance of the selected franchisee units. The data required to be used as an input should be the customer wise data on various parameters that reflect the customer satisfaction in respective selected industries. The output generated helps in evaluating the performance of the selected franchisee unit in the respective industry based on the data entered with regards to individual customer feedback.

A systematic procedure is adopted to use programming in Turbo C++.

Below given is the opening screen of Turbo C++, when the program is to be used for generating the result.

User/ programmer has to click on ‘Start Turbo C++’ option/button in the below given screen in order to design the suitable programmes. Figure 9.1 shows the opening screen of Turbo C++.
Following procedure may be adopted to generate output of the programmes in Turbo C++.

1. Click on File and Open the Folder Containing All Programmes
The user needs to select ‘File’ option and click on ‘Open’. It allows the access to all the programmes that are designed and saved for compilation and for providing the result after they are ‘Run’. Below given figure exhibits the same.

**Figure 9.2: Opening Written Programmes in Turbo C++**

2. **Choose the Respective Programme to be Compiled**

From the given list of all programmes, the program which needs to evaluate the performance of the selected franchisee unit needs to be clicked in order to allow it to generate the result of evaluation.
Figure 9.3 shows the list of programmes from which a programme that evaluate the performance of selected Food and Beverage franchisee unit has been selected for generating of results. The selected programme needs to be compiled before it is run for the result generation.

Figure 9.3: Selecting the Respective Programme in Turbo C++

Source: Screen Shot in the Software Turbo C++

3. **Compile the Selected Programme**

To generate result of a selected programme in Turbo C++, it needs to be executed. For this purpose of execution, the selected programme is compiled.
Compilation confirms that the programme is error free. If there are any errors, they need to be corrected till the programme becomes error free.

Following figure exhibits the compilation screen of the selected programme in Turbo C++.

Figure 9.4: Compiling the Selected Programme in Turbo C++

![Figure 9.4: Compiling the Selected Programme in Turbo C++](Source: Screen Shot in the Software Turbo C++)

Figure 9.5: Result of Compilation of Selected Programme in Turbo C++

![Figure 9.5: Result of Compilation of Selected Programme in Turbo C++](Source: Screen Shot in the Software Turbo C++)
4. **Run the Selected Programme For Results**

The selected programme has to be practically used to generate the result/output. This requires the ‘Run’ command to be executed as shown in below given figure.

**Figure 9.6: Running the Selected Programme in Turbo C++**
The above figure shows the programme ready to be executed. Once the user clicks on the Run command the following screen appears as shown in figure 9.7 where clear instruction is given to the user to evaluate the selected franchisee unit using the customer feedback on selected parameters. The user needs to give the values as per the customer feedback on each of the parameter that will appear on the screen one by one. Towards the end, the screen will show the result as generated by the programme as shown in the figure 9.8 which follows the below given figure.

**Figure 9.7: Output screen of Turbo C++ Instructing the User to Provide Individual Customer Feedback Data.**
Figure 9.8: Final Output Screen of Turbo C++ Evaluating the Selected Franchise Unit in Food and Beverage Industry

Figure 9.9: Opening the Programme in Turbo C++ to Evaluate the Selected Franchise Unit in Consumer Goods Industry
Figure 9.10: Final Output Screen of Turbo C++ Evaluating the Selected Franchise Unit in Consumer Goods Industry

Performance Evaluation of the Franchise Consumer Goods unit

Kindly grade the following parameters based on your experience
1 being the least grade & 10 being the highest

1. Cleanliness of store ------ 7
2. Quality of Goods ------- 8
3. Interiors ----------- 5
4. Employee Knowledge ------ 7
5. Brand Image ------- 8
6. Uniqueness of design ------- 6
7. Display Factor -------- 8
8. Variety of Goods ------- 9
9. Customer Care -------- 6
10. Payment Option ------- 8

Weighted average performance Grade of the franchise unit ---- 7.06

Performance Grade of the franchise unit ---- Very Good
Figure 9.11: Opening the Programme in Turbo C++ to Evaluate the Selected Franchise Unit in Consumer Service Industry

![Screen Shot in the Software Turbo C++](image1)

Figure 9.12: Final Output Screen of Turbo C++ Evaluating the Selected Franchise Unit in Consumer Services Industry

```
Performance Evaluation of the Franchise Consumer Services unit
Kindly grade the following parameters based on your experience
1 being the least grade & 10 being the highest
1 Service Quality ------- 8
2 Brand Image ------- 8
3 Standardisation ------- 9
4 Interiors ------- 9
5 Specialisation ------- 6
6 Expertise of Staff ------- 7
7 Availability of Demanded Service ------- 7
8 Customer Care ------- 6
9 Payment Option ------- 6
10 Convenience of Store ------- 6

weighted average performance Grade of the franchise unit--- 7.67-
Performance Grade of the franchise unit ---- Very Good
```

Source: Screen Shot in the Software Turbo C++
Figure 9.13: Opening the Programme in Turbo C++ to Evaluate the Selected Franchise Unit in Education Sector

Source: Screen Shot in the Software Turbo C++

Figure 9.14: Final Output Screen of Turbo C++ Evaluating the Selected Franchise Unit in Education Sector
Figure 9.15: Opening the Programme in Turbo C++ to Evaluate the Selected Franchise Unit in Hotel Industry
In the above exhibits, figure 9.10, 9.12, 9.14 and 9.16 show the picture of the output screens as how it would generate the result when the user provides the individual customer feedback data. This customer satisfaction feedback is with regards to selected franchisee units in the industries such as consumer goods, consumer services, education and hotel industry respectively.

**9.8 CHAPTER SUMMARY**

The present chapter intended to develop a systematic performance index in order to evaluate the performance of the franchise units operating under selected industries. The researcher has
selected ten parameters that explain the customer satisfaction with the franchise unit under evaluation based on the nature and type of industry for developing the performance index.

Each industrial sector selected for the purpose of study is unique in its own way therefore; parameters for measuring customer satisfaction differ across the industries selected. By following a scientific approach and a systematic procedure, the researcher has come up with a performance index based on a customer satisfaction survey data and this index will be of significance in measuring the performance of every franchise unit forming a part of the selected industries.

The researcher also has developed a software programme using Turbo C++ which instantly provides the result of customer satisfaction feedback on the franchise business under evaluation and grades it at different levels of performances. For the purpose of grading the performance of franchise business under evaluation, the standards have been predetermined by the researcher considering a systematic methodology.
References

1. www.businessdictionary.com>definition.


3. Retrieved from m.infoentrepreneurs.org/en/guide

4. www.skillmaker.edu.au


