CHAPTER – 1

INTRODUCTION AND RESEARCH METHODOLOGY

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1.1 Title of the Research Study:
“Critical analysis of gap between the hotel management education and current hotel industry requirement around pune city”.

1.2 Introduction:
The spectacular growth of the education sector has led to the mushrooming of a large number of institutes. The numbers of students being churned out every year are growing too. As India continues to show a good economic growth rate, the demand for trained workforce is increasing too. Today we are in an increasingly globalised world. There is many a slip between the cup and the lip as they say – so this transition is not easy from campus to corporate. There seems to be an increasing gap in what the institutes teach and what the industry expects. When the corporate sector visits for campus recruitments, more often than not, they seem to get a very few skilled candidates. They have a requirement which cannot be fulfilled.

It seems that there is an increasing number of students coming out of the neo and non-academic managed colleges that contribute to non-employability or under-employability. It is necessary to have strong foundations in professional subjects. The ability to integrate the learning and apply them in new and different situations is the key to a successful career. One of the major challenges for the institutes is to get their students at par with the industry requirements.

Hospitality and tourism industry gained momentum in the 1990s when rapid expansion in the tourism industry created a demand for skilled staff. Rapid expansion in the industry during the last decade of the twentieth century and the first decade of the new millennium translated into increased opportunities for graduates of hospitality and tourism programs. Demand for better educated, more knowledgeable and multi-skilled workers capable of holding managerial and supervisory level positions increased.

Like the education sector, the hospitality sector too is witnessing growth year on year. Incredible India! And ‘Atithee Devo Bhava’ (Guest is God) campaigns did succeed in
revving up the interest in Indian culture and sites. Every year, the number of foreign nationals coming to India is seeing a steady growth. This in turn has upped the demand for infrastructure. One of the important aspects of the same is rooms for accommodation. Indian hotel chains are fast expanding and increasing their capacity. In addition to this, there is a huge onslaught of foreign chains which are entering the Indian market.

All this development of new hotels has spurred a demand for trained personnel. So the hospitality industry is booming and so is the hospitality education sector. The complex nature of the industry has significantly intensified the complexity of the role of supervisory or managerial staff. The staff need to work virtually through others as well as hands-on. Therefore, staff is challenged with an expectation of making revenue out of each and every action and activity. This expectation demands innovative, effective and resourceful personnel, who are not only good in technical competencies but also in generic competencies. This reflects the fact that employers are looking for vital soft skills in graduates which are obtained during study or periods of work experience rather than degree specific knowledge.

Statements from employers’ organisations comment on the difficulty employers experience in recruiting ‘work-ready’ individuals. Therefore, it is relevant to consider whether graduates have the opportunity to develop these work related skills through education. Furthermore, education will only achieve its purpose when it produces graduates with competencies the industry demands. When there is a gap between the competencies required and possessed, the graduates become less attractive to the industry and vice versa. Most often curriculum developers are caught in between. They try to balance between educational requirements and industry needs. There is a need for a study to create an awareness of the needs of the industry among students, help academic curricula to cater to the industry needs, demonstrate the level of competence of the graduates in different generic skill areas both from their own point of view and that of industrialists.
It is crucial for the graduates to acquire the employability skills or key competencies for employment through the academic curriculum to be marketable in the industry. Most of the educational institutions provide careers service to support graduates in gaining employment. Such services in isolation may not address the more complex issue of enhancing employability. Employability is about much more than the acquisition of a first job and relates to a broader set of achievements that enhance students’ capability to operate in a self-sufficient manner within the labour market. The purpose of any course be it engineering, hotel management or any other management degree or post graduation is to equip the students with knowledge and skills that can be applied in real life i.e. practically at work.

The ultimate aim is to make them industry ready so that they can get opportunities in the industry to do relevant work enriching themselves as well as the society directly or indirectly.

The term ‘employability skills’ is used to refer to ‘a set of achievements like – Skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefit them, the community and the economy’ (Yorke and Knight, 2006). In general, employability skills are skills and personal attributes identified by employers as important for employment. The employability skills identified are relevant to both entry level as well as established staff. Employability skills have also been referred as ‘generic skills’ and ‘key competencies’.

Whilst the role of education in contributing towards economic development and student employability may have been implicitly assumed for many years, it is only recently that this has become an explicit requirement for institutions. There is a need to ensure the academic curriculum not only meets educational expectations but also industry and student expectations regarding the skill sets needed at the workplace. It is quite common to have a classical gap or conflict between the theory and practice that is normally found in almost any field of knowledge.
Competency includes both the possession of knowledge and the behavioural capacity to act appropriately. To develop competencies one must both be introduced to knowledge and have the opportunity to practice the skills. As the industry becomes more professionalized and organised, competency building has become more important. Many researchers mention that ‘soft’ human relation skills including oral and written communication and interpersonal communication are essential for graduates and trainees to possess. From the literature, it is obvious that the skills or competencies hospitality industry demands from the graduates are not generally industry specific. They are very common skills learnt in most of the academic disciplines.

Institutes are beginning to pay heed to this. Hence some interaction has begun between industry and institutes through various forums like seminars, guest lectures, summer training, industry visits etc. However these are very few and also there is need to see the effectiveness and the reach of these initiatives. It is necessary to examine this in detail and have some roadmap ready. Industry should not have to run a parallel training institute or basic programs to do what the institutes have failed to do. As stated earlier, the ability to integrate the learning and apply in real life scenarios is required. In addition, soft skills such as communication and team work are critical to ones growth as a professional.

While education provides a strong theoretical background, one needs to translate it to a more tangible structure that is employment friendly. Fundamentally, as a society since independence, our spotlight has been on learning methodology from school days and not towards collaborative efforts in terms of communication and articulation so much as memorization and being able to produce what you have assimilated on paper. In an era where education does not necessarily guarantee you employment, a comprehensive learning environment that is in sync with the industry requirements is imperative.

As mentioned, institutes churn out graduates, not necessarily industry ready. Thereafter the onus is on the Corporate. The Corporate have to deal with unskilled workforce and/or shortage of competent manpower. Hence they have to rise to the occasion. Only a few big ones with excellent financial muscle can do so. If institutes were imparting relevant skills
and training, the big names in the hospitality industry would not have required to set up training institutes or have collaboration with universities to impart education. A large number of hospitality organizations have extensive training i.e. in-house training operations for fresh recruits. While this training is fine to get the recruits at par with the concerned organization, their requirements, their brand standards and acculturation but it should not be to teach or train the recruits on the basics.

1.3 Research Methodology:
In this section, the background of the study, statement of problem, objectives, hypotheses, significance and limitations of the research study are stated along with the methodology adopted for the research study which includes the research plan and design, sample size and sampling procedure, sources of data collection, statistical analysis of data and tests and tools used for the same.

1.3.1 Background of the Research Study:
It is necessary to have strong foundations in professional subjects. The ability to integrate the learning and apply them in new and different situations is the key to a successful career. In addition, soft skills such as communication and teamwork are critical to one's growth as a professional. While education provides a strong theoretical background, one needs to translate it to a more tangible structure that is employment friendly.

The research will study the gap between the education system and current industry requirements and find ways to bridge it. This will give a feel of the approach and application of knowledge to real world problems. According to NASSCOM study, Indian companies spend twice as much on training fresh graduates than their US counterparts. There is an increasing need to plug this problem at the primary level, schools and colleges. Thus the study will be addressing a very important issue faced by the industry. The outcome of the study will have theoretical significance as well as practical application. The suggestions can be used by the institutes and the corporate very effectively. A recent survey conducted by PurpleLeap, a joint venture between Parsons
and Educomp, says only 12 percent of the surveyed undergraduates were employment ready. While 52 percent of the students were trainable, 36 percent were untrainable.

Barring a few sporadic activities, disconnect between the institute and industry has been observed. This disconnect needs to be addressed and we need to look at building a better relationship between the hotel management education institutes and hotel industry at large. There should be a symbiotic relationship between the two so that each is aware of the other and work towards a common goal benefitting both in the long run. The industry would benefit by getting well turned out recruits and save considerable training and other costs. Also the institutes will benefit from the industry interaction by being updated by the latest developments and trends in the industry and will be more in sync with what is happening in the real world! The general focus would be increasing liaison between institutes and the industry.

There is a need to relook at the syllabus and the traditional methodology of teaching. The importance of innovation needs to be stressed. What innovative techniques can be used in bridging the gap! The importance of ideation, discussion and innovation needs to be debated and deliberated upon.

1.3.2 Statement of Problem:
Hospitality industry criticizes the hotel and tourism education for not adequately preparing people for employment in the industry. An understanding of how best to educate and develop human capital would benefit the hospitality and tourism industry as a whole. The hospitality industry should develop its standards and expectations. Employer’s opinion of the employees’ skills is a useful assessment of training education quality. Such a survey in hospitality may reveal the gap in education and training and hence be used to identify the competencies required in the industry for quality service. The quality of the skills depends on the competency in these skills.

As per the report published by the Ministry of Tourism in the year 2012, there is a gap with regards to the demand and supply of human resource in the hotel industry and hence
the degree and the diploma courses are needed for hotel management education across India, more particularly in the western region. After going through the report the researcher felt that there was a need to study the subject further. Also the national employability report of hotel management graduates shows that there is a requirement of 1.5 lakhs trained personnel per annum in the hospitality industry whereas there are only 50,000 trained personnel available per annum for the same. This shows the requirement of the trained personnel in the hospitality industry. (National Employability Annual Report). The report found out that the candidates were not clear about the fundamentals and basics of hotel management and their only aim was to go abroad by securing a job without any interest in developing the required skills for the job.

Of the total number of hotel management graduates being churned out every year, very few are employable in Four and Five star category hotels as majority of them have no exposure to the industry requirements. We will study this gap between our education system and current industry requirements and find ways to bridge this. This will give them a feel of the approach and application of knowledge to real world problems.

With this background the researcher will be examining what institutes are doing (or not doing) curriculum wise and otherwise to get their students “industry ready”. The study will also highlight the expectations of the Corporate, locate the ‘gap’ and suggest ways to bridge this gap. Hence it is extremely crucial to survey institutes and check their understanding of the industry needs. This will bring out the awareness or the lack of awareness about the fact that there exists a gap. We would then be in a position to go into the identification of the skills gap.

For the purpose of this study, it is assumed that there indeed exists a wide gap between what institutes offer and what the hotel industry needs. Of the total number of hotel management graduates being churned out every year, very few are employable in Four and Five star category hotels as majority of them have no exposure to the industry requirements.
The research methodology will bring out all the relevant issues in this study. Since interaction with both the industry and institutes is essential, various techniques like interviews (across levels), questionnaires, opinion surveys etc. have been used.

Apart from focusing on the academia (in institutes) and management (industry), the researcher has also surveyed the students (in institutes). The collected data will be analyzed, interpreted and conclusions will be drawn from them.

The study includes various aspects like growth of Hotel Management Institutes in the city, their infrastructural facilities, affiliations, faculty and students intake, methodology of students intake, criteria of selection, detailed outline of the courses/graduation, curriculum, latest updation done and methodology. It will also include student’s development in terms of extracurricular activities and counseling. A review of faculty development and exposure, campus recruitment data, selection procedure, candidates selected, and finally placed in the industry would be done. Also data regarding those not selected is vital.

1.3.3 Objectives of the Research Study:

1. To study the growth of four and five star hotels and hotel management institutes in and around Pune city.
2. To identify the requirements of hotel industry regarding recruitment and also to identify the employability factor of hotel management candidates.
3. To assess the industry institute liaison.
4. To understand the gap in the industry need and the availability of candidates.
5. To suggest initiatives to bridge the gap effectively.

1.3.4 Hypotheses of the Research Study:

1. \( H_0 \): There is no significant difference in the ranking of the factors according to their importance with respect to employability in 4 / 5 star hotels.
2. \( H_1 \): There is a significant difference in the ranking of the factors according to their importance with respect to employability in 4 / 5 star hotels.
2. \( H_0 \): There is no significant gap in the educated and the employable candidates. 
   \( H_1 \): There is a significant gap in the educated and the employable candidates.

3. \( H_0 \): There is no significant liaison between the hotel industry and the hotel management institutes. 
   \( H_1 \): There is a significant liaison between the hotel industry and the hotel management institutes.

4. \( H_0 \): There is no importance of practical training on the employability factor of the students of hotel management institutes. 
   \( H_1 \): There is importance of practical training on the employability factor of the students of hotel management institutes.

4.3.4 Significance of the Research Study:
This study will evaluate critically the different initiatives, if any, which institutes undertake to bridge the institute-industry gap and also the periodicity, reach and effectiveness of these initiatives and finally to suggest ways to bridge this gap effectively to institutes based on this study and the effect of this gap on campus recruitment.

The study can be used as a guide to re-look at the syllabus, revision methodology and generally the way ahead for more industry-institute collaboration. On the other side, the industry too can be encouraged/motivated to work closely with students, educational institutions, government and finishing schools. Ideally this can result in more ‘employability’ of the students.

As mentioned earlier, the percentage of undergraduates that are employment ready is low as surveys point out. This clearly shows that if done comprehensively, a lot can come out of this research that can be implemented. The percentage of employable students can go up; also the percentage of un-trainable students can be reduced. It can thus lead to betterment. Also though, the research would be restricted to the hotel management stream, the outcomes/findings can be applied to other streams of education/vocations as well. The overall plan and strategy will be to focus on the investigations in both the industry and the institutes.
4.3.5 Limitations of the Research Study:
The following are the limitations of the research study.

1. The study is restricted to the 4 Star and 5 star hotels around Pune city only.
2. The time frame covered in the study is 2011 – 2014.
3. The conclusions and suggestions made regarding the gap may not be applicable to the whole industry.
4. In the absence of an authoritative body, four and five star hotel lists are culled from the Ministry of Tourism, FHRAI (Federation of hotel and restaurant association of India), and top campus recruiters as mentioned by the institutes.
5. The study is not restricted to one particular department or function of the hotel industry. The study is aimed at the overall skill requirement.
6. The study has considered only selective skills and competencies.

4.3.6 Methodology:
The following methodology has been used to find out the outcome of the research and to arrive at the conclusions based on the findings. The research process for this study could be divided into three parts.

- Research plan carried out as per research design
- Testing of Hypotheses
- Conclusions and Suggestions

4.3.6.1 Research Plan and Research Design:
1.3.7.1.1 Research Plan:
The research plan on which the study was carried over has been presented here. The research plan was drafted as under:

a) Identification of problem area
b) Setting of Objectives
c) Reviewing and examining of relevant literature
d) Collection of information from secondary sources regarding hotel industry.
e) Sample size, population size, justification of population size
f) Pilot study for questionnaire
g) Preparatory work for designing the questionnaire, drawing up the draft questionnaire, its pilot testing, analysis of the sample and finalization of the questionnaire done in consultation with experts

h) Collection of primary data using suitable questionnaires and data entry

i) Analysis of primary data carried out with the help of statistical tools to draw findings, testing of hypotheses, interpretations and conclusions

j) Presentation of certain suggestions on the basis of findings and conclusions

1.3.7.1.2 Research Design:
As per views of various experts and authors, analytical research uses facts or information already available, and analyzes them to make a critical evaluation of the material. While descriptive research, also known as statistical research, describes data and characteristics about the population or phenomenon being studied, descriptive research answers the questions i.e. who, what, where, when and how.

Thus, on the basis of the above, researcher has used the tools which were appropriate for the study. This study which is related to the skill and competency gap between the hotel management education and current hotel industry requirement around Pune city is descriptive and analytical due to the nature of the study. The following table no. 1.1 will explain the research design used for the study.

Table No. 1.1: Research Design

<table>
<thead>
<tr>
<th>Research Design</th>
<th>Research Methodology</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Research</td>
<td>Descriptive Research</td>
<td>It is concerned with condition, practices, structures, differences, or relationships that exist, opinions held, processes that are going on or trends that are evident.</td>
</tr>
<tr>
<td>Analytical Research</td>
<td>It involves the identification and interpretation of data already existing in documents, pictures</td>
<td></td>
</tr>
<tr>
<td>Nature of the Study</td>
<td>Quantitative Study</td>
<td>Focuses on measurement and proof, based on scientific approach</td>
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<td>-----------------------------</td>
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<td>----------------------------------------------------------------</td>
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<tr>
<td>Data Collection Approach</td>
<td>i) Primary Data</td>
<td>Questionnaire Method, Interview Method, Formal and Informal Discussion</td>
</tr>
<tr>
<td></td>
<td>ii) Secondary Data</td>
<td>Related Published Books, Magazine, Journals, Published Report Articles &amp; Manuals, Related web sites</td>
</tr>
<tr>
<td>Interview Type</td>
<td>Structured Interview &amp; Formal and Informal discussions</td>
<td>Verbal questioning for gaining relevant information related to research study</td>
</tr>
<tr>
<td>Measurement Technique</td>
<td>Questionnaire Design</td>
<td>Questionnaire 1: Employees (Hotel Industry)</td>
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<tr>
<td></td>
<td></td>
<td>Questionnaire 2: Students of Hotel Management Institutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaire 3: Faculty of Hotel Management Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Questionnaire 4: Hotel Management Institutes</td>
</tr>
<tr>
<td>Sampling</td>
<td>Population size</td>
<td>As per the questionnaire no.: 1) As Per list of Hotels published by Ministry of Tourism, Federation of Hotels and Restaurant Association of India (FHRAI), Travel related websites and campus recruiters = 58</td>
</tr>
</tbody>
</table>
2) As per the information collected from the university of Pune and websites of institutes = 655
3) As per the data collected through Opinion Survey
4) As per the list provided by the Savitribai Phule Pune University (SPPU), Tilak Maharashtra Vidyapeeth (TMV) and Bharati Vidyapeeth Deemed University (BVP) = 15

| Sample Size | 1) Hotels = 20  
2) Faculty = 101  
3) Students = 243  
4) Institutes = 15 |

| Analysis of Data | Software, Statistical Tests & Statistical Tools | SPSS package used (Test of Reliability, Mean, Percentage Analysis) |
| Testing of Hypotheses | Statistical Tools | Z test, Rank Correlation |
| Presentation of Thesis | Software used | MS Word, MS Excel |

[Source: Field work]

4.3.6.2 Sample Size and Sampling Technique:
A research population is also known as a well defined collection of individuals or objects known to have similar characteristics. A research population is generally a large collection of individuals or objects that are the focus of scientific query. To understand the opinion of the population researches are conducted. However due to the large size of the population it is difficult to test and obtain detailed data from every individual of the population. If each and every individual of that population is to be tested, then it will
become time consuming and expensive. Hence appropriate sampling should be done which will represent the appropriate population. The researcher has used the target population in the form of hotels, hotel management institutes and students of hotel management institutes. For the population of Hotels the population size has been obtained from the list of hotels. For the number of institutes and students, the list has been obtained through field work as explained in the above table no.1.1. Thus our study will be addressing a very important issue faced by the industry. The outcome of the study will have theoretical significance as well as practical application. The suggestions can be used by the institutes (primarily) and the industry very effectively.

4.3.6.2.1 Sample Size:
This research study has covered four and five star hotels around Pune city. Collecting appropriate samples from available population is the most important aspect of any research study. For this research study three different populations have been considered namely hotels, hotel management institutes and students of hotel management institutes. On the basis of population size the selection of appropriate sample size has been made as given in table no. 1.2.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Type of respondents</th>
<th>Population Size</th>
<th>Sample Size (Expected)</th>
<th>Actual Responses received</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hotels</td>
<td>58</td>
<td>12 (20% of 58)</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Students</td>
<td>655</td>
<td>242</td>
<td>243</td>
</tr>
<tr>
<td>3</td>
<td>Institutes</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

[Source: Field Work]

4.3.6.2.2 Justification of Sample Size:
As discussed earlier, for any research in social science justification of sample size is important. One of the basic objectives of research is to collect appropriate sample which will represent the population. The present research study is related to the gap in the hotel management education and current hotel industry requirements around Pune city. The researcher has observed that there are two groups which are relevant to the study which are the Hotel Industry and the Hotel Management Institutes. Opinion survey of faculty of
hotel management education has been done since they are the people who train the potential candidates for employment. The opinion of the students of hotel management education has been collected through questionnaire since they are the potential workforce of the hotel industry.

**Justification of sample size - Hotels:**
A sample of 20 percent of the total population i.e. around 12 hotels was chosen for the study as the sample and data has been collected from 20 four and five star hotels put together using simple random sampling.

**Justification of sample size – Students:**
In case of the total number of Students studying in the final year in the hotel management institutes, the list was obtained from the University of Pune and from the respective institutes for the academic year 2013-2014. The total number of students was 655. The sample size was calculated as given below:

\[
N = \frac{NZ^2 \times 0.25}{d^2(N-1) + [Z^2 \times 0.25]}
\]

Where,
- \(n\) = Sample size required (?),
- \(N\) = Total population size (655),
- \(D\) = Precision level (0.05),
- \(Z\) = No. of standard deviation units of the sampling distribution corresponding to the desired confidence level (1.96).

With the above mentioned formula the value of \(n\) comes to 242.37 rounded off to 242. Hence the sample required is 242 students.

**Justification of sample size – Hotel Management Institutes:**
In case of the total number of hotel management institutes, all the hotel management institutes (100 percent) affiliated under the universities in Pune i.e. SPPU, TMV and BVP were considered for the study.
4.3.6.2.3 Sampling Technique:
Simple Random Sampling has been done from the list obtained from the authentic sources. This technique is also known as probability sampling which is based on the theory of probability. It provides a known chance of selection for each population element. This sampling technique yields a representative sample and hence the findings of the sample survey are generalisable to the population. The closeness of a sample to the population can be determined by estimating sampling bias or error. Through randomization, the danger of unknown sampling bias can be minimized. Hence random sampling has been used for the study. For the hotel industry the sample was collected across 20 hotels chosen for the study using simple random sampling. From the final year students of 15 hotel management institutes a representative sample from each institute was collected using simple random sampling. All the 15 hotel management institutes providing the Hotel Management Courses have been studied. An opinion survey of faculty members from the chosen hotel management institutes was collected.

4.3.6.3 Sources of Data Collection:
For this research study the data and information is collected through primary source and secondary source. The details of these sources and process are explained below:

4.3.6.3.1 Primary Source:
The primary data was collected through a structured and pilot-tested questionnaire for hotel employees (118), faculty members (101), students (243) and hotel management institutes (15) with sample of total 477 respondents. The information was collected directly from the head of the departments/concerned authorities of hotels, faculty members of hotel management institutes, students and hotel management institutes. The primary data was collected through Questionnaire method, Interview Method and Observation Method which are briefly mentioned below.

1) Questionnaire Method: The formal instrument in the form of questionnaire was developed to test the gap between the hotel management education and the current hotel industry requirements. In this research study, the information has been collected through
the ‘Questionnaire’ method. Hard copies of questionnaires were circulated to the concerned respondents. In few hotels the respondents returned the filled questionnaire immediately. But in some hotels the respondents kept the questionnaire with them and mailed the questionnaire or scanned a copy of the hard questionnaire and sent it to the researcher later. The faculty and students of the hotel management institutes were also circulated the hard copies of the questionnaires and then collected from them.

2) Interview Method: In this method interviews were scheduled with the respondents and questions were asked orally and information related to the questionnaire was collected. In the case of the hotel management institutes the researcher collected data by asking questions to the representative of the institute and filled the questionnaire himself through formal and informal discussions.

3) Observation Method: In this method Researcher has observed different points & things which are useful for interpreting the data. Formal & informal discussions with respondents helped the researcher to analyse, interpret & to arrive at conclusions.

4.3.6.3.2 Secondary Source :
The Sources of secondary information are printed and electronic annual reports, working papers, journals, books, magazines and research work and it consist of
1. The data about different related research work and opinion of researcher’s about their work
2. The data about old and existing literature regarding hotel management education and the requirement of the hotel industry.
3. The data related to legal provisions, rules and regulations and norms issued by the government.
4.3.6.4 Designing of Questionnaire:
The aim of this thesis is to find out the gap between the hotel management education and the current hotel industry requirement. Before formulating the research questions, various sources of materials regarding the subject were examined. Below, the key points from these sources are outlined, and subsequently the research questions are introduced.

1.3.7.4.1 Pilot Study:
After reviewing different literatures and research studies regarding this topic, the tentative questionnaires were prepared and a pilot study was conducted. A pilot study implementation was very much necessary in order to test all kinds of ever changing conditions to check the responses. The pilot study formed the platform for this research. It was conducted on 3 hotels, 10 faculty members, 20 students and 3 institutes. The sample for the pilot study was collected from hotels and institutes around Pune city. Executing the project through the pilot survey, various skills and competencies required in the hotels and the skills and competencies acquired through hotel management education were identified and used for the study. Furthermore, the hotel employees, the faculty members and students were asked to suggest measures to overcome the gaps in the hotel management education and current hotel industry requirement. From the findings of the pilot study the researcher has observed different skills like technical, communication, problem solving, human resource management, presentation, leadership, coordination, time management, soft skills etc. and also the important factors then an employee must possess like knowledge, personality, qualification, experience, attitude, commitment, team work etc. Based on the findings of this pilot study the researcher decided to use likert type scale and then the final Questionnaires for Hotels, Faculty, Students and Hotel Management Institutes were prepared.

1.3.7.4.2 Preparation of Questionnaire:
On the basis of the Pilot Study and the objectives of the research study the researcher has prepared a questionnaire for all four participants of the study. The names of the questionnaire are given below:
Questionnaire I: Hotel Industry
Questionnaire I was prepared to collect opinions of the Hotel Industry. The questionnaire consists of 17 questions. Question no. 1 to 7 provides the basic information of the respondents like their name, the name of the hotel they work for, the department they work for, their gender, experience with the hotel industry and educational qualification. Question no. 8 gives the opinion of the respondent on whether their hotel liaises frequently with the hotel management institutes in the city or not. Question no. 10 provides information on the factors considered by the industry while selecting an employee. Question no. 11 gives information on the most important factor for the career development of the respondent. Question no. 12 provides information on the type of qualification preferred by the industry while selecting candidates for the job. Question no. 13 gives information regarding the campus connect programme of the hotel for better relations and frequent interaction with the academia. Question no. 14 provides information on the score the industry expects the candidates to score during the interview. Question no. 15 gives the ranking of the factors according to their importance with respect to employability in five star hotels. Question no. 16 gives the opinion of the respondents on certain statements and question no. 17 was open ended with asked the respondents to suggest initiatives to increase industry participation to benefit students and make them industry ready.

Questionnaire II was prepared to collect the opinion of the Students of Hotel Management Institutes. This questionnaire consists of 21 questions. Question no. 1 to 5 gives the basic information of the respondent. Question no. 6 and 7 gives information regarding the training received by the students. Question no. 8 and 9 give information regarding the career choices made. Question no. 10 gives the opinion regarding the knowledge of the hotel industry with respect to educators. Question no. 11 and 12, give information regarding the campus recruitment and on-the-job training. Question no. 13 to 16 provide information regarding the job, factors that are considered to be important by
the Human Resource Department and the factors important for an employee of hotel industry. Question no. 17 and 18 gives information on the initiatives undertaken by the institute regarding industry institute liaison. Question no. 19 provides the opinion of the respondents regarding experience, career opportunities, qualification, curriculum etc. Question no. 20 and 21, give information on the skills and competencies of the respondents and the opinion regarding skills and competencies that are important for employment in 5 star hotels.

Questionnaire III was prepared to collect the opinion of the faculty members of the hotel management institutes. The questionnaire consists of 25 questions. Question no. 1 to 6 provides the basic information of the respondent. Question no. 7 to 9, give information regarding the subjects, courses and specialization available in the institute. Question no. 10 and 11, give information regarding the training. Question no. 12 and 13 talk about the campus recruitment. Question no. 14 gives information regarding the revision of curriculum. Question no. 15 and 16 provides opinion of the respondents on the gap between the educated and employable candidate and suggestions to bridge the gap. Question no. 18 and 19 provides the details regarding the considerations of the Human Resource Department while recruiting a new employee and the factors important for an employee in the hospitality industry. Question no. 20 gives the opinion on the curriculum, experience, career option, training, industry institute liaison etc. Question no. 21 provides the list of initiatives with industry institute liaison at the college. Question no. 22 talks about the measures through which the faculty can update themselves with industry developments. Question no. 23 gives the reasons for the failure of students in getting good openings in star hotel chains. Question no. 24 provides suggestions to increase industry participation to benefit students to make them industry ready. Question no. 25 provides opinion of the faculty regarding the skill and competencies of the students.

Questionnaire IV was prepared to collect the information regarding the Hotel Management Institutes. This questionnaire consists of 5 questions. Question no. 1 and 2 give information regarding the name of the institute and the courses offered by the institute. Question no. 3 and 4 provide information regarding the total number of students
in the final year and faculty in the institute. Question no. 5 gives information regarding the percentage of students recruited through campus recruitments in the past three academic years.

**4.3.6.5 Data Analysis and Statistical Tests and Tools Used:**
For this research study the data has been collected from three groups. In this section the data collection process, coding of data and the statistical tools used for the analysis of the data has been explained.

**1.3.7.5.1 Data collection process:**
The research study is related Hotel Management Education. Hence four and five star hotels, hotel management institutes, students of hotel management institutes and faculty of hotel management institutes around Pune city have been selected for data collection. For the hotel industry the list has been obtained from the sources mentioned in table no.1.1. The questionnaires were distributed to the staff of the four and five star hotels and the data was collected. For the hotel management institutes all the institutes under the Pune university, Tilak Maharashtra Vidyapeeth and Bharati Vidyapeeth have been considered and the data was collected using a questionnaire designed for the same. For the faculty of hotel management, opinion survey was conducted and data was obtained through questionnaire. For the students of hotel management institutes the number of students was found out through field work. The questionnaires were distributed among the students and the data was collected accordingly.

**1.3.7.5.2 Coding of Data:**
Before using statistical tools one important part we have to include is the coding of data, when the researcher received the data in various forms, the data was needed to be recorded in central data sheets as per the groups and then all entries needed to be checked. Then all statistical activities were processed. Hence coding is an important part of the analyzing activity. For coding of data the following steps have been used by the researcher.
• Coding of data done with the help of Microsoft excel sheet: Questionnaire I, II, III and IV

• Assign numerical values for each and every field

• Test Synchronization with Questionnaire I, II, III and IV

• Recorded all the entries in coded format in excel sheet.

• Import all coded data to SPSS Software and preparing for statistical data Analysis.

All the four questionnaires were coded by assigning numeric value to each and every field. The data collected through three different questionnaires have been coded as below:

**Questionnaire I – Hotel Industry:**

Question no. 1 to 7 gives the basic information regarding the respondent. The department of the respondent has been coded as 1 = Human Resource; 2 = Front Office; 3 = House Keeping; 4 = Accommodation; 5 = Kitchen; 6 = Food and Beverage; 7 = Sales and Marketing and 8 = Administration. The designation of the respondent has been coded as 1 = Director; 2 = Manager; 3 = Assistant Manager and 4 = Executive. The gender has been coded as 1 = Male and 2 = Female. The experience with the hotel industry has been coded as 1 = 1 to 5 Years; 2 = 6 to 10 Years; 3 = 11 to 15 Years; 4 = 16 to 20 Years and 5 = Above 20 Years. The educational qualification has been coded has 1 = Hospital Management Degree; 2 = Hotel Management Diploma; 3 = Other Degree; 4 = Other Diploma and 5 = Professional Course. Question no. 8 to 10 were coded as 1 = Yes and 2 = No for each option provided. Question no. 11 was coded as 1 = Private Institute Degree / Diploma in Hotel Management; 2 = University Degree / Diploma in Hotel Management; 3 = AICTE Approved Diploma / Degree in Hotel Management and 4 = Others. Question no. 12 was coded as 1 = Yes and 2 = No. Question No. 13 and 14 has been taken at the actual value given and has not been coded separately. Question no. 15 has been coded as 1 = Disagree; 2 = Neutral and 3 = Agree.

**Questionnaire II – Students of Hotel Management Institutes:**

The gender has been coded as 1 = Male and 2 = Female. The name of the course studied has been coded as 1 = 4 years BHMCT; 2 = 3 years BSc. HS; 3 = Diploma in Hospitality
Management and others. The percentage of classroom and practical training received has been coded as 1 = 1 to 20; 2 = 21 to 40; 3 = 41 to 60; 4 = 61 to 80; 5 = 81 to 100 and 6 = No Training. The frequency of the training sessions has been coded as 1 = Regularly; 2 = Twice in a Year; 3 = Once in a Year; 4 = Once in Two Years; 5 = Once in Three Years and 6 = At the end of the course. The reason for choosing the course has been coded as 1 = Passion; 2 = Career; 3 = Glamour and 4 = Last Resort. The question regarding intention of the student to follow a career related to the hotel industry has been coded as 1 = Yes; 2 = Not Sure and 3 = No. The question on the faculty’s knowledge about the industry has been coded as 1 = Yes; 2 = Not Sure and 3 = No. The availability of campus recruitment has been coded as 1 = Yes and 2 = No. On the job training as a part of the course has been coded as 1 = Compulsory; 2 = Optional and 3 = No on-the-job training. Question no. 13 to 15 contains multiple choice and multiple response questions which have been coded as 1 = Yes and 2 = No for each option. The question on opinion regarding the statements provided has been coded as 1 = Agree; 2 = Neutral and 3 = Disagree. Question no. 19 and 20 regarding self rating on the important factors for employability has not been coded and has been taken at actual value.

**Questionnaire III – Faculty of Hotel Management Institutes:**

The gender has been coded as 1 = Male and 2 = Female. The experience has been coded as 1 = 0.1 to 3 Years; 2 = 3.1 to 6 Years; 3 = 6.1 to 9 Years; 4 = 9.1 to 12 Years; 5 = Above 12 Years and 6 = No Experience. The question on switching over from industry to academics has been coded as 1 = Yes and 2 = No. The educational qualification has been coded as 1 = 4 years BHMCT; 2 = 3 years BSc. HS; 3 = Diploma in Hospitality Management and 4 = Others. The subjects taught by the respondent has been coded as 1 = Food and Beverage; 2 = Travel and Tourism Management; 3 = Management; 4 = Accommodation and Management; 5 = Front Office and Management; 6 = House Keeping and Management and 7 = Language and Communication. The availability of the course in the institute has been coded as 1 = Yes and 2 = No and the percentage of classroom and practical training has been coded as 1 = 1 to 20; 2 = 21 to 40; 3 = 41 to 60; 4 = 61 to 80; 5 = 81 to 100; 6 = No Training and 7 = Not Applicable. The specialization
available in the course and the compulsory training in industry has been coded as 1 = Yes and 2 = No.

The period of training provided to the students has been coded as 1 = 0.1 to 2 months; 2 = 2.1 to 4 months; 3 = 4.1 to 6 months; 4 = 6.1 to 8 months; 5 = 8.1 to 10 months; 6 = Above 10 months and 7 = No Training. The type of hotel in which the students are sent for training has been coded as 1 = All Hotels; 2 = Only 5 Star Hotels; 3 = 4 Star and Above; 4 = 3 Star and Above; 5 = 2 Star and Above; 6 = 1 Star and Above and 7 = No Training. The question on campus recruitment has been coded as 1 = Yes and 2 = No. The percentage of students employed through campus recruitment has been coded as 1 = 1 to 20 percent; 2 = 21 to 40 percent; 3 = 41 to 60 percent; 4 = 61 to 80 percent and 5 = 81 to 100 percent. The question on frequency of revision of curriculum has been coded as 1 = No Revision; 2 = 1 to 3 Years; 3 = 4 to 6 Years and 4 = After 6 Years. The opinion of the respondent regarding the gap between the educated and the employable candidates have been coded as 1 = Yes and 2 = No. Question no. 17 to 18 has been coded as 1 = Yes and 2 = No for each option provided in the question. The question regarding the opinion on the statements has been coded as 1 = Strongly Agree; 2 = Agree; 3 = Neutral; 4 = Disagree and 5 = Strongly Disagree. The question regarding rating of students on the employability factors on the basis of performance of the course has been taken at actual value.

**Questionnaire IV – Hotel Management Institutes:**

This questionnaire has not been coded and entered in to SPSS. A simple three year average of the recruitment of students has been calculated.

**1.3.7.5.3 Statistical Methods / Tools used for data analysis:**

As the research consists of large sample size, the data falls in the category of the normal distributions. After coding of data the analysis has been done by using various tests and statistical tools for data analysis. The following are the statistical tools used by the researcher.

- Microsoft word: - For Data Presentation.
- Microsoft Excel:- Data Storage Tool
- IBM SPSS: - For Data Analysis & Interpretation.
- Statistical test: - For Testing of hypotheses

The statistical tools used by the researcher are explained in detail here.

**Microsoft word - Data Presentation:**
All the collected data were consolidated and processed through Microsoft word. The data was divided into chapters and all relevant information related to the specific chapter was recorded with the help of word processor and also advance functions like font selection, margin selection was done through Microsoft word. Tables and graphs are visual representations. They are used in the study to organize information to show patterns and relationships between different variables related with retailers and consumers. Different graphs and charts have been used for better presentation of the data.

**Microsoft Excel: - Data Storage Tool:**
Excel is an electronic spreadsheet program that can be used for storing, organizing and manipulating data. A cell is the basic unit for storing data in the spreadsheet. Because an Excel spreadsheet contains thousands of these cells, each is given a cell reference or address to identify it. The cell reference is a combination of the column letter and the row number. The researcher has used this tool to store the data collected through the questionnaire. Functions used for this research include: Performing basic mathematical operations such as summing columns and rows of figures, finding the average, maximum, or minimum values in a specified range of data, graphing or charting data, sorting and filtering data to find specific information. The information garnered in the spreadsheet has been incorporated into SPSS.

**SPSS: - For Data Analysis & Interpretation:**
Statistical Package for the Social Sciences (SPSS) was religiously used for the statistical analysis. Coding of variables in a quantitative research is very critical for better interpretation of results. The questions and responses were coded and entered in the computer using Microsoft Excel Software. Required analysis was done with the aid of Statistical Package for Social Sciences. Certain statistical methods were applied on the
data to get the results which were analyzed. After the excel sheet was completed with coding of data the researcher exported all the data to SPSS software package, checked all fields, scales and other parameters of data and then applied various tools i.e. mean, median, mode and various tests to generate reports for the study.

**Statistical test:**
The researcher has used different statistical tools like the Reliability testing of the data, Measures of Central Tendency (mean), Z test and Rank Correlation.

**Measures of Central Tendency:**
A measure is considered as the most representative figure for the entire mass of data. Measure of central tendency is also known as statistical average. Mean, median and mode are the most popular averages. Mean, also known as arithmetic average, is the most common measure of central tendency. Its chief use consists in summarizing the essential features of a series and in enabling data to be compared. Mean is better than other averages, especially in economic and social studies where direct quantitative measurements are possible. Median is a positional average and is used only in the context of qualitative phenomena, for example, in estimating intelligence, etc., which are often encountered in sociological fields. Median is not useful where items need to be assigned relative importance and weights. It is not frequently used in sampling statistics. Mode is the most commonly or frequently occurring value in a series. The mode in a distribution is that item around which there is maximum concentration. In general, mode is the size of the item which has the maximum frequency, but at items such an item may not be mode on account of the effect of the frequencies of the neighboring items. Like median, mode is a positional average and is not affected by the values of extreme items. It is, therefore, useful in all situations where we want to eliminate the effect of extreme variations. Mode is particularly useful in the study of popular sizes.

**Z-test:**
A statistical test used to determine whether two population means are different when the variances are known and the sample size is large. The test statistic is assumed to have a
normal distribution and nuisance parameters such as standard deviation should be known in order for an accurate z-test to be performed. A z-test is used for testing the mean of a population versus a standard, or comparing the means of two populations, with large (n ≥ 30) samples whether you know the population standard deviation or not. It is also used for testing the proportion of some characteristic versus a standard proportion, or comparing the proportions of two populations. A Z-test is any statistical test for which the distribution of the test statistic under the null hypothesis can be approximated by a normal distribution. The Z-test has a single critical value (for example, 1.96 for 5% two tailed) which makes it more convenient. For the Z-test to be applicable, certain conditions must be met. Z-tests focus on a single parameter, following steps are followed. There are the following basic steps to completing a hypothesis z-test.

1. State the Null Hypothesis and the alternative hypothesis
2. State the decision criteria
3. Selection of confidence level: Confidence interval (CI) is a kind of interval estimate of population parameter and is used to indicate the reliability of an estimate. It is an observed interval and differs from sample to sample that frequently includes the parameter of interest, if the experiment is repeated. How frequently the observed interval contains the parameter is determined by the confidence level or confidence coefficient. Confidence intervals consist of a range of values that act as good estimates of the unknown population parameter. The level of confidence of the confidence interval would indicate the probability that the confidence range captures this true population parameter given a distribution of samples. Researcher has selected the confidence level equal to 95% which reflects a significance level of 0.05.
4. Determine the critical value of z. Do this for the chosen significance level. For alpha=.05 we look up a Z that has .025 of the distribution beyond it. This is a Z of +1.96 and -1.96.
5. Interpret the data
6. Evaluate the hypothesis -Determine the standard error of the mean.
7. Calculate the Test Statistic: To determine how unusual the mean of a sample is, use the following Z formula to calculate the Z value for our sample mean under the assumption that the null hypothesis is true.

8. Decision Making Time: obtained Z value up in a Z table to find the corresponding P, and compare it to the Critical Z value. If the obtained P is less than alpha, we reject the null hypothesis.

Rank Correlation:
For expressing the degree of relationship quantitatively between two sets of measures of variables usually the help of an index that is known as coefficient of correlation is taken. It is a kind of ratio which expresses the extent to which changes in one variable are accompanied with changes in the other variable. It involves no units and varies from -1 (indicating perfect negative correlation) to +1 (indicating perfect positive correlation). In case the coefficient of correlation is zero; it indicates zero correlation between two sets of measures (Singh, 2006). In computing coefficient of correlation with the help of this method ranks are i.e. positions of merits of these individuals in the possession of certain characteristics. Charles Spearman’s coefficient of correlation (or rank correlation) is the technique of determining the degree of correlation between two variables in case of ordinal data where ranks are given to the different values of the variables. The coefficient of correlation is computed by this method as it considers only the ranks of the individuals in the characteristics A and B and is known as Rank correlation coefficient and is designated by Greek letter (Rho). Sometimes it is also known as Spearman's coefficient of correlation after the name of its inventor (Singh, 2006). The main objective of this coefficient is to determine the extent to which the two sets of ranking are similar or dissimilar. As Spearman’s rank correlation is a non-parametric technique for measuring relationship between paired observations of two variables.

Reliability testing of the data:
One widely accepted classification of validity consists of three major forms: Content, criterion-related, and Construct. Reliability of measure indicates the extent to which it is without bias and hence ensures consistent measurement across time and across the
various items in the instrument. Thus, reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of measure. SPSS has the reliability analysis procedure. This reliability procedure is executed on the data to assess its reliability. In reliability analysis, the analyze menu is considered. The descriptive statistics menu is further considered and the polar to polar plot is plotted for different variables. Reliability analysis is carried out where the Cronbach’s alpha was tested. Ideally, the Cronbach’s alpha should be in between 0.5 and 1. In our case, it comes out to be above 0.6 (As per Table number 1.4). Therefore, the data is reliable. Following tables shows the SPSS output of reliability analysis.

Table No. 1.3: Case Processing Summary - Reliability

<table>
<thead>
<tr>
<th>Employee (Hotel Industry)</th>
<th>Faculty</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>100</td>
<td>101</td>
</tr>
<tr>
<td>Excluded</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100.0</td>
</tr>
</tbody>
</table>

[Source: Field Work]

Table No. 1.4: Reliability Statistics

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (Hotel Industry)</td>
<td>0.708</td>
<td>66</td>
</tr>
<tr>
<td>Faculty</td>
<td>0.659</td>
<td>85</td>
</tr>
<tr>
<td>Students</td>
<td>0.641</td>
<td>69</td>
</tr>
</tbody>
</table>

[Source: Field Work]

4.3.6.6 Experiences of the Researcher:

Given the topic and the scope of research, conducting a survey of hotel management faculty was crucial. After the questionnaire was prepared, the researcher approached hotel management faculty after getting blanket permissions from their respective Principals. Being in the same field, the researcher knew a lot of faculty as colleagues.
Hence it was easy to approach them. They too understood the topic, acknowledged its relevance and responded enthusiastically. Most of the approved/full time faculty of 16 institutes answered the questionnaire. Their insights were very useful. While getting questionnaires filled from them was relatively easier, the researcher noticed a few prejudiced opinions in the answers. For instance, faculty who have no experience (or negligible experience) in the industry stated that industry experience does not make a difference in the teaching and thus rated accordingly. Overall the researcher was satisfied with the number of responses and responses from the hotel management faculty fraternity.

Like faculty, students too form important part of the academic cycle and future employees of the hotel industry. Being stakeholders in the same, students from various institutes were approached for the survey. This was mostly done with the help of the institutes. Since the numbers targeted were high, most of the institute’s students were covered. The students were final year students by and large since they have already undergone industrial training and have experienced the industry first hand. Also being in the final year, they have followed the subjects and syllabus for the last few year/semesters. While getting the targeted sample size was a challenge, looking at the responses, it seems some questions were not clearly understood by the students. This is despite the fact that a lot of questionnaires were filled by students after giving them a thorough brief on the questionnaire.

Another important stakeholder was the hotel industry. Since there is no standardization in the rating of hotels, survey became a challenge. Most of the industry personnel (recruiters) were very busy, kept delaying or refusing the questionnaire. Some of them could not appreciate the importance of a research (any research) arguing that the industry is labour intensive and service oriented. This lead to considerable delay. Most of the targeted industry personnel were either HODs i.e. Heads of Departments or those who play a part in the recruitment of candidates.
On discussions with the guide, the researcher decided to add another questionnaire to the existing three questionnaires. This was a brief questionnaire set and every institute had to fill in only one. We approached the Training and Placement officers (TPOs) / senior faculty in charge, Vice principal, Head of Department (HOD) as per case to case. While they showed enthusiasm to fill in the faculty survey, they were a bit reluctant to fill in this one since it involved placement figures over 3 years. They all claimed that the placements were excellent. Most of them wanted to give a common 100% placement answer without even looking at the records. They also claimed that remaining students didn’t want to be placed due to reasons like further studies and going abroad etc.

4.4 Chapter Scheme:
The chapter scheme of the research thesis is given below:

Chapter I: Introduction and Research Methodology
Chapter II: Theoretical Framework and Literature Review
Chapter III: Overview of Hotel Industry and Hotel Management Institutes
Chapter IV: Data Analysis and Interpretation – Hotel Industry
Chapter V: Data Analysis and Interpretation - Students
Chapter VI: Data Analysis and Interpretation – Faculty & Institutes, Testing of Hypotheses
Chapter VII: Findings of the Study, Conclusions and Suggestions

Annexure I: Questionnaire – Hotel Industry
Annexure II: Questionnaire – Students
Annexure III: Questionnaire – Faculty
Annexure IV: Questionnaire – Institutes
Annexure V: Students Recruited Through Campus
Annexure VI: List of Hotels
Annexure VII: Scope for Further Study
4.5 References:

2. A.T. Kearney’s Global Retail Development Index (GRDI), 2012.