A CONCEPTUAL MODEL FOR TALENT MANAGEMENT IN INDIAN HOSPITALITY INDUSTRY – HR ANALYTICS FOR RECRUITMENT/ EMPLOYEE ATTRITION

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ABSTRACT

HR Analytics offers a great potential to improve the quality of decision making on human capital issues in an organization. Indian hospitality industry is booming in recent years and has a tremendous potential for growth. Despite mammoth potential, hospitality industry suffers from myriad problems such as wide skill gap, shortage of talented manpower and high attrition rate. The purpose of this paper is to explore the application and integration of HR analytics into the concept of Talent management. This paper is an exploratory research to understand the talent management process in hospitality sector in India. The study is based on extensive study of secondary sources to frame conceptual model of Talent Management for hospitality industry. A Talent management model is proposed, that can help the hospitably sector to bridge the talent management gap, if implemented effectively. There is a need to actively engage senior management and HR professionals in talent management practices to achieve organizational efficiency and competitive advantage.

INTRODUCTION

The concept of 'Analytics' emerged in the past decade as a major force for driving data-based decision-making in the field of Human Resources (Levenson, 2011). In today's competitive world, HR analytics has become an imperative part of business in managing big data. Many companies have invested in big data and analytics to better understand human behavior, performance, and value creation. HR analytics is a multidisciplinary HR approach to link methods to improve the quality of people-oriented decisions in order to improve individual and organizational effectiveness. HR analytics plays an important role in every aspect of the HR function, starting from hiring, training and development, succession planning, Talent management, employee engagement, compensation, employee welfare, workforce collaboration patterns, and comprehending employee lifetime. This paper will harness HR analytics to make the area of Talent management more effective.

HR ANALYTICS FRAMEWORK

An organization should collect raw facts from various sources through social media, online job portals, various surveys etc. The second step involves data visualization and cleaning of unwanted data and converts it into a meaningful model that can be used for prediction. The next step involves applying ML and Data Analytics and prepares a concluded report that can show employee metrics and help the Management make better decisions.

Figure 1: Cyclic Framework of HR Analytics
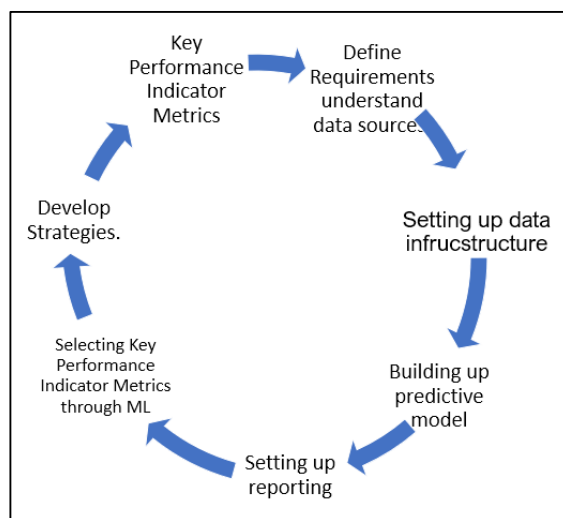
Source: Author compilation

A group of McKinsey consultants coined the term "Talent Management' in 1997, and since then, the concept has caught the attention of HR practitioners and academicians immensely.

Talent management has become a topic for both debate and research in recent times. The literature on Talent Management explores the concept in every possible direction, using a range of academic parameters, including HRM and career management (Gallardo-Gallardo et al., 2013). The concept of talent management is the major theme and challenge for the hotel industry, placed next to succession planning, leadership development, innovation, and performance management (Thunnissen, M., Boselie, P., & Fruytier, B., 2013). As per the Goldman Sachs study, India will be the largest contributor to the global labor force and will add about 110 million workers by 2020. To sustain the growing workforce, India needs to create 8.1 million jobs a year to maintain its employment rate (World Bank report).

A majority of Indian industries are facing the challenge of Talent management. According to a report released by INSEAD business school in partnership with Google and Adecco Group, India ranks 72nd on Global Talent Competitive Index (GTCI), 2020. According to the report, India's biggest challenge is to improve its ability to attract and retain talent. India needs to focus on areas of 'business-government relations' and 'regulatory systems'. Manpower Group India, in its 13th report on 'Talent Shortage 2020' revealed that the extent to which India faces difficulty in finding the skills it needs ranges from 56 – 65 percent.

Mayo (2018), in his study, identified four categories of talent that can be managed in an organization:

- Individuals with high potential – Constitutes 1% of the total workforce. They possess the qualities to become future leaders.
- Individuals with strategic capabilities - Constitutes 20 % of the total workforce. They are critical analysts, possess technical and leadership skills.
- The graduate population – Constitutes 50% of the population. They have the ability to do broader or bigger jobs in the future.
- Individuals with a unique talent – Constitutes nearly 97% of the workforce. They possess unique talent that an organization can gradually develop.

In the Indian hotel industry, there is a need for management to identify, retain and develop all four talent categories. There is a need to retain job families whose skills are hard to acquire and replace. Individuals belonging to such job families possess capabilities like personal skills, professional and business know-how, qualification and experience, and wide contact (Mayo, 2018).

This article reflects upon the concepts of 'Talent Management' given by Thunnissen, M., Boselie, P., & Fruytier, B. (2013). This article explores the problems related to talent management in the Indian hotel industry concerning skill gaps and attrition rate. This article aims to propose a talent management model for the senior management executives and HR professionals of the hotel sector to identify a talent gap in their organizations and align their talent management plans with the growth plans of their organization to mitigate the attrition rate. The various areas explored make use of HR analytic tools to manage big data related to the workforce.

This paper proposes a talent management model for hospitality industry practitioners to use as they address the complex issues related to talent management. The model consists of four key elements:

1. Identifying the talent gap
2. Identifying and hiring talent
3. Developing and deploying talent
4. Retaining talent

With the advancement of technology, especially the growth of the Artificial Intelligence and Data Science field, it has been essential for the HR management field to have data-driven applications in order to predict employee behavior. With the attrition help, algorithm authors demonstrated how to measure employee attrition and make the prediction for existing employees. The forecasting algorithm always helps an organization to have more employee retention and select only suitable potential candidates.

LITERATURE REVIEW

Managing talent or practicing talent management (TM) or global talent management (GTM) extremely well is not a choice for companies but a mandate for companies that want to succeed and excel (Schuler, 2015). The talented employees have the strategic capabilities that can increase the productivity, efficiency, and competitive advantage of organizations in all industries (Sabuncu, K. U., & Karacay, G.; 2016). In order to contemplate the concept of talent management, we should first define the term 'talent' extensively. From organizational point of view, talent refers to human capital in an organization that is both valuable & unique, generating four quadrants: low-value/high uniqueness (partners), high value/low uniqueness (traditional), high-value/high uniqueness (core creatives) and low-value/low-uniqueness (de Vos, A., & Dries, N., 2013). As per Tansley (2011), individual talent is a combination of high potential (Ability, Aspiration, Engagement Emotional commitment: Rational commitment, Intent to stay, Passion and motivation), high performance (high levels of expertise; leadership behaviors; creativity; and initiative stemming from a "can-do attitude" based on self-belief.) and individual strengths (Positive psychology).

Some authors suggest the competency model as an important step towards talent management practice in an organization (Phillips & Roper, 2009). The behaviors associated with a particular performance level can be defined as a competency, and competencies can also be built from content knowledge and cognitive or behavioral skills (Hunt and Weintraub, 2002). Another important aspect for talent metrics is person's potential that is defined as the ability to become a key leader in the functional or technical area fast. Mayo (2018) has categorized the potential into three -

• Potential to rise high in hierarchy, and gaining new heights
• Potential to portray technical or leadership skills i.e., showing 'depth'
• Competent in more than one area, i.e., showing 'breadth'

Talent Management involves supply, demand and flow of talent through the human capital domain (Pascal, 2004). Lewis & Heckman (2006), look at Talent management from three perspectives – definition of Talent Management, concept of talent pools and concept of generic talent and as per them, the concept and perspective of TM are still unsatisfying. Talent Management process consists of the following activities (Uren, 2007; Vaiman, Haslberger and Vance, 2015; Mayo, 2018)

1. Talent strategy and planning
2. Identifying, recruiting, and selecting talent from the external labor market.
3. Developing and deploying employees.
4. Ensuring retention of talented employees.

As per Collings & Mellahi (2009), strategic talent Management is about systematic identification of key positions, developing a talent pool of high potential to fill these positions, and developing a differentiated human resource architecture to gain competitive advantage. The need for talent management is based on the fact that talent management improves performance which drives productivity and competitiveness (Baum 2012). Talent management should be adopted throughout the industry as a distinct approach to managing people so as to promote positive perceptions of the industry as an employer and service provider, to indicate that employees are valued and valuable (Maxwell, 2008).

Figure 2: Global Talent Management Strategic Framework
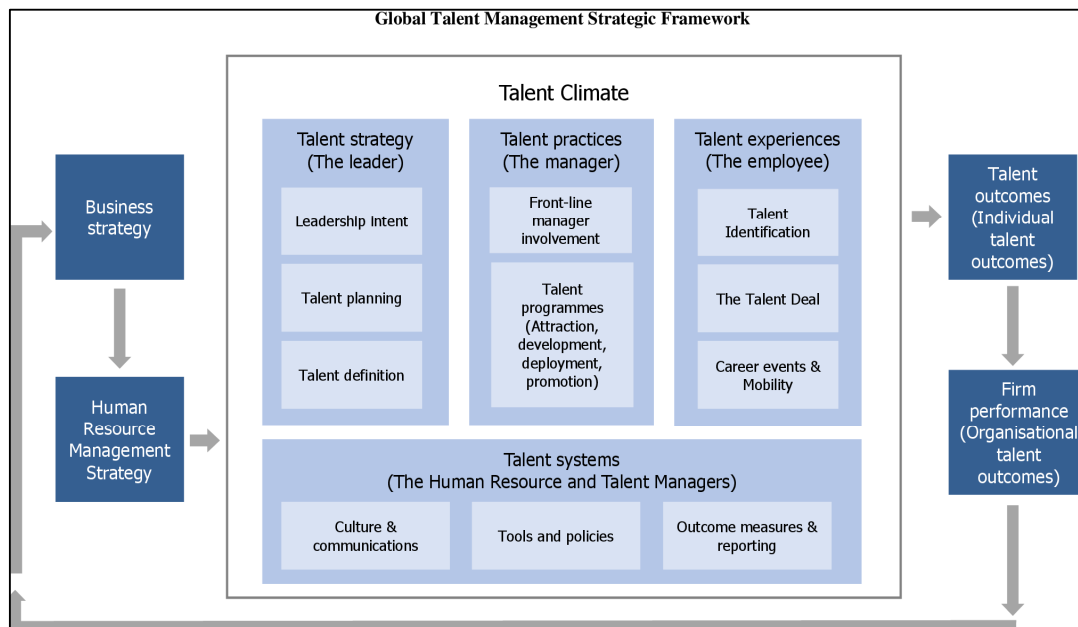
Source: King (2015)

Latukha (2014) claims that the lack of managerial and professional talent has become one of the most important human resource management challenges for the majority of multinational companies. Talent management issues are limited to those MNEs or big local companies and have become crucial for all companies regardless of their size and level of internationalization (Festing, Schafer & Scullion, 2013). Tourism is a labor-intensive industry that provides skilled, semi-skilled, and unskilled workers directly and indirectly (Subbarao, 2008). It benefits the larger ecosystem with its direct and indirect advantages, and today it enjoys the status of being one of the key generators of employment in the country. In 2017-18, over 81.1 million Indians, accounting for 12.38% of the total workforce, were employed by the sector. The number is expected to rise by 2 percent annum to 52.3 million jobs by 2028 (ibef.org).

With a sea of employment opportunities on one side, the tourism industry, unfortunately, faces a talent supply and demand mismatch on the other side. The shortage of skilled and trained employees in the labor-intensive hospitality industry is acute, and there is a wide mismatch between job requirements and candidates available. The hospitality industry is a high customer–service–oriented business where interaction between employees and customers determines the business's competitive advantage and success (Chand, and Katou, 2007). So in the hospitality industry, there is a need for professional candidates who have good knowledge and experience of serving and interacting with people. Companies can compete based on the skills and talents of their employees and are exploring that, by attracting and retaining the best and the most deserving employees, the company can achieve higher than average market share and raised profits (Smith, 2007).

Employee turnover is one of the main employee outcomes of talent management. Challenging work, learning, and awards affect general work conditions, and those factors, in return, influence both organizations' and sectors' turnover rates (Sabuncu, and Karacay, 2016). The hotel industry also faces a high attrition rate based on low wages, poor working conditions, lack of job security, work stress, lack of recognition & growth, and promotion opportunities (Getz, 1994). Hotels generally regard high turnover as part of the norm, and employees believe that they are entering jobs with limited career development opportunities (Davidson, Timo, and Wang; 2010). Poor image of the industry to qualified graduates, ambiguous attitudes to investment in personnel development, inflexible employment, and an unsustainable approach to talent development and higher labor turnover is an indication that the hospitality industry will face greater challenges in talent management than other sectors (O'Leary and Deegan, 2005, Jithendran and Baum, 2000). There is a need to change the negative perception of the industry and the development of a 'career culture' which drives the young workforce to enter the industry (Cairncross & Buultjens, 2010). Also, it is imperative for the hospitality industry to focus on human resource practices and emphasize employee identification with the organization in order to not reduce turnover intentions among employees but also to improve their performance (Santhanam, et al., 2015). Talent Management in the hospitality industry needs formal processes, stakeholder participation, and strong links between leadership and talent so that specific industry-oriented skills and attributes can cascade to all organizational levels.

Table 1: Framework on Talent Management

Authors	Contribution and results
Oehley, 2007	Partial Talent Management competency model. Based on factors 1. Organisational job satisfaction and (2) Supervisory job satisfaction
Cappelli, P., 2009	Supply chain Model for Talent management. It is based on 4 principles • Make and Buy to Manage Risk • Adapt to the Uncertainty in Talent Demand • Improve the Return on Investment in Developing Employees • Preserve the Investment by Balancing Employee-Employer Interests
Collings & Mellahi, 2009; Kim et.al., 2014	Strategic Talent Management Model to contribute to the organisation's sustainable competitive advantage
Phillips & Roper, 2009	Talent management framework for real estate. The framework consists of five key elements: (1) attracting; (2) selecting; (3) engaging; (4) developing; and (5) retaining employees.
Boudreau, Hopp, McClain and Thomas, 2003; Levenson, 2011	Capability-Opportunity-Motivation (COM) model for identifying the complete range of factors that impact individual performance
financeSchuler, 2015	The 5C framework for managing talent. The five Cs are – Choices, Considerations, Challenges, Context/Contingencies, Consequences
Tarique & Schuler, 2012; Vaiman, Haslberger and Vance, 2015; Mayo, 2018	The Talent management process
McDonnell et. Al., 2010; King, 2015; Vaiman, Haslberger and Vance, 2015	Global talent management strategic framework and multiple-actors model for multinational enterprises
Tajuddin, Ali, & Kamaruddin, 2015	Talent management crisis model for quality life - to examine the impact of talent management programs on employee value proposition or intention to leave in Malaysian Banking System

Source: Author

MACHINE LEARNING FOR RECRUITMENT PROCESS

Following the traditional approach does not assure promising results in Human Resource Management. Machine Learning is an approach under advance AI, where the algorithms are designed to allow the machine to learn from its mistakes and experience. Data-driven ML algorithms can analyze and transform it into valuable insights regarding the professionalism and preferences of a candidate and ensure a friendly and perspective environment that would encourage all candidates to become a part of the organization for a longer time.

OBJECTIVES OF THE STUDY

The paper seeks to explore the grounds as to how the senior management and HR professionals of the hospitality industry perceive the existence of a talent gap in their organizations and how they are implementing talent management strategies to retain desired talent. Also, the article has made an attempt to frame a conceptual model for Talent Management, which could help manage talent by implementing certain strategies. Subsequently, the article also makes an effort to identify talent gaps existing in the industry and how to overcome it.

RATIONALE OF THE STUDY

The rapid expansion of the hotel industry of an international standard in India creates a high demand for skilled and trained manpower, which demands efficient, high-quality service. Since a greater number of people are frequently traveling, resulting in more demand for hotels even in the remotest locations. Indian hotel is still people-oriented, and manpower costs are affordable when compared to other countries. With hotels expanding at 20 to 25 percent per year, the shortage of skilled manpower is experienced not at the higher level, which is more difficult to fill, but even at the lower ones. The paucity of skilled manpower is exacerbated by the outdated training programs carried out in the various institutes, which have to be upgraded inevitably. Indian hotel industry faces a tough issue of talent gap that poses a major threat to the overall development of tourism. Moreover, the attrition rate in the hotel industry is extremely high. In fact, the hotel and restaurant industry alone experience an employee turnover rate of 73.8%, which is exponentially higher than the annual average of 10 -15%. The literature surveyed give evidence of various Talent management model from HR analytic point of view. The various models explored gave the author insight into the concept of 'Talent Management' to frame a Talent management model for the hospitality industry, which, when implemented, will help the management to nurture and retain talent.

METHODOLOGY

The findings are derived from the secondary sources readily available. Various reports and working papers were referred to – World Bank report; NSDC report; Goldman Sachs study; Manpower Group report, apart from numerous journals. The in-depth analysis of available literature had helped the author to frame the Talent management model to identify talent gap, acquiring talent, developing and deploying talent for pivotal roles and retaining talent.

The study will also suggest solutions to check the high attrition rate in the hotel and restaurant industry. The concept of HR analytics is applied throughout the exploration of the given model. An attrition algorithm is used to demonstrate how to measure employee attrition and make the prediction for the existing employees. For the attrition algorithm, a primary dataset between 30 to 55 age groups of employees was used.

Proposed Talent Management Model – In the proposed framework, the potential or competence of an individual and values forms the core of the organization. The given model provides focus to the organization and consists of four key elements:

1. Identifying the talent gap
2. Identifying and hiring talent
3. Developing and deploying talent
4. Retaining talent

COMPETENCE AND VALUES

The first step of HR analytics is to analyze the competence of an individual. Figure 2, demonstrates a model of competence, which together make up the values of an individual. Competence and values together form a basis from where the talent management process begins. Cultural values are defined as a rich complex of meanings, beliefs, practices, symbols, norms prevalent among people in a society and is regarded as shaping and justifying individuals' effect, behaviors, and cognitions (Schwartz, 2003). Competence is a keyword in HRD and is used in developing, training, and educating employees in such a way that they are able to meet the demands of work (Stoof, 2002).

Figure 3: Competency Model

| Competence		
Personal Skills	Business know-how	Experience & Educational qualification

People-related areas are one of the most crucial parameters to measure. It helps explore talent to fill the gap, in hiring and promotional decisions, and in training and development to measure program effectiveness (Mayo, 2018). An individual's CV reflects experience, educational qualification, and to some extent, areas of expertise. Personal skills can be assessed by positive and negative indicators, and business know-how can be assessed using a five- or seven-point linear scale.

EFFECTIVENESS OF TALENT MANAGEMENT PROCESS

The second area of HR analytics is looking into the attributes in effectiveness for managing various Talent management processes. Figure 4 shows the framework of Talent management and its four processes.

Figure 4: Talent Management Model
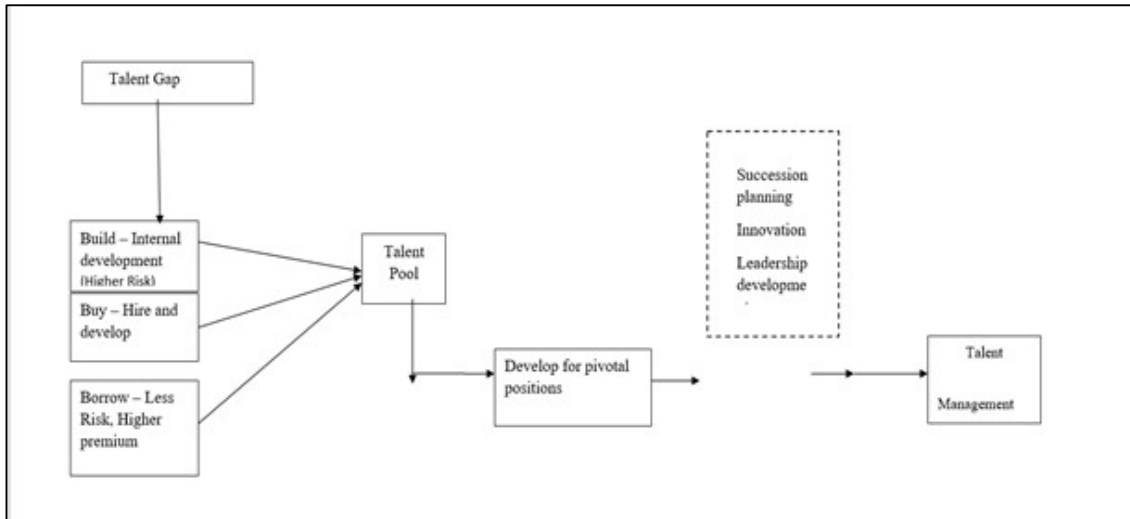
Source: Author compilation

IDENTIFYING THE TALENT GAP

The role of HR analytics starts with identifying the talent gap existing in the hotel industry. In order to identify the gap, there is need to outline the key components of potential or competence of an individual. There is a need for an HR manager to focus on all the components rather than only behavioral competency.

Figure 5: Overall structure of hotels and restaurants
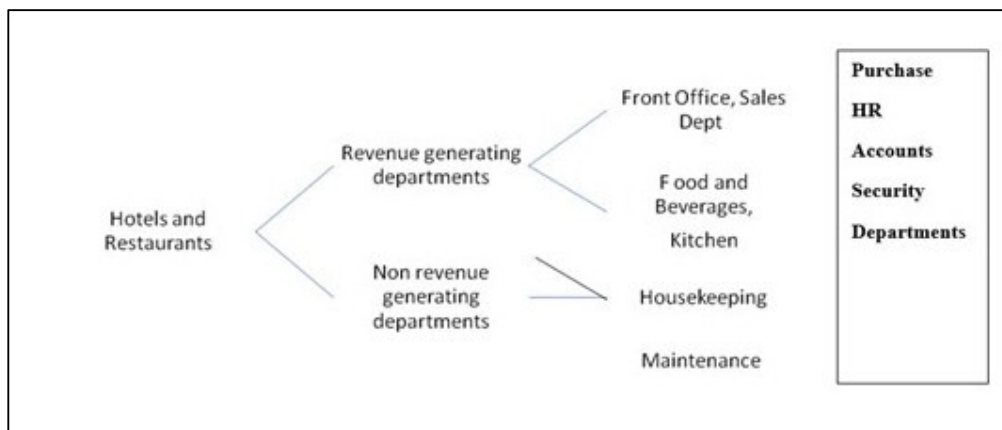
Source: NSDC Report

Table 2: Educational qualification for manpower in Hotels and Restaurants

Functional area	% of people	Educational qualification
General Manager / Manager	5%	MBA, CA, CS, ICWA
Managers / Supervisors / Assistants - Front office, F&B, House Keeping Kitchen (Chef/Cook/Steward), Purchase, Sales, HR etc	20 – 30%	Post Graduates/Graduates
Chef, Steward, Line cook, F&B services etc	25 – 55%	Diploma
Kitchen staffs, Front office – Bell boys, Waiters/Servers, Bartenders, Security guards, Room service etc	20 – 40%	High school and below
	100%	

Source: NSDC Report

SKILL REQUIREMENTS AND SKILL GAPS IN HOTELS & RESTAURANTS

Table 3: Skill Requirements and Skill Gaps in Hotels & Restaurants (Managerial level)

Function	Level	Skills required	Skill gaps
Front office	Front office manager	- Smooth functioning of the department. - Good problem-solving skills, people management skills and communication skills. - Ability to maintain history and network with guests. - Review room availability status and promote sales. - Co-ordination with F&B, Housekeeping etc.	- Inadequate skills to interact with guests. - Inability to proactively review occupancy and promote. - Inadequate ability to manage team.
F & B	Senior Captain/ Restaurant manager/ Beverage manager	- Supervisory skills, Good communication skills - Ability to manage F&B Inventory - Basic knowledge of cuisines	- Inadequate people management skills - Inability to handle

		• Ability to interact with guests • Ability to manage customer complaints	customer complaints.
Food production	Executive Chef/ Head Chef/ Sous chef	• Ability to prepare different kinds of cuisine • Awareness of food calorific values. • People management skills, Food presentation skill, Good communication skills • Innovation in food preparation • Ability to plan menu • Knowledge of food costing, Quality control, Inventory management	• Inadequate awareness of latest cuisines • Inadequate people management skills • Inadequate knowledge of cost management
Housekeeping and Maintenance	Executive – Housekeeping/ Chief engineer	• Smooth functioning of the department • People management skills, Problem-solving skills • Ability to groom staff • Knowledge of using housekeeping equipments, vacuum cleaning machines, laundry, etc. • Ability to interact with guests.	• Inadequate skills to interact with guests. • Inadequate ability to manage team • Inability to control and groom staff

Source: NSDC Report

The size of the tourism industry is expected to grow from currently Rs. 4413 billion to Rs 21,011 billion by year 2022 (growing at the CAGR of 13%). The employment in the hotel category is forecasted to increase from 2.9 million in 2018 to 4 million in 2022. Apart from the employment generation for skilled/trained manpower arising due to new establishments, there would be additional employment generation for skilled/trained manpower from the conversion of the unorganised sector to organised sector (NSDC Report).

Identifying and hiring talent

After identifying the talent gap in the hospitality sector, the next step is to hire the bright talent by the recruiters of the firm. The talent can be identified internally, for filling the senior vacancies. The success of internal selection depends on the percentage of talent identified who fulfils potential expectations. Internal recruitment is time saving as well as less expensive.

However, if the vacancies cannot be fulfilled by internal recruitment, companies can opt for external hiring. There are significant time and financial investments involved in this process, particularly for hiring executive level. An organization needs to be creative while developing a recruitment strategy and avoid traditional recruiting methods when hiring Generation Y and millennials (Phillips & Roper, 2009). Traditional hiring methods such as resume screening, conducting aptitude tests, and a reference check is becoming obsolete in objectivity terms and losing their reliability and authenticity, thereby increasing costs on training and ROI. The objective methods of selection such as psychological assessment, technical skill assessment, soft skills assessment, behavioral interviews, in combination with other hiring tools, should be used for optimum personality-job fit. The effectiveness of hiring depends on how many external candidates accepted the job offers and their employee value proposition in the market.

Companies can also outsource/borrow manpower from outside, which is less risky and gives a higher premium. The reason for this mode of hiring is that the use of outside service providers is more efficient and less costly than hiring staff to handle these functions in-house.

Developing and deploying talent

The organizations should be able to differentiate between employees who are strategic performers and those who are not, and for the pivotal jobs to have a substantial impact on organizational performance. It is important that such jobs are filled with high performing or high potential employees (Collings & Mellahi, 2009). Once the people with high potential and high performance are identified, the individuals should be strategically deployed and supported with HR policies (Collings & Mellahi, 2009). Employee performance is a function of the employee's ability, motivation, and opportunity to perform (Boselie et al., 2005). Therefore the future leaders and high performers should be given challenging jobs continuously, should invest in learning, and should be given recognition/ rewards for their efforts. The talented employees will stay in an organization when there is - cordial relationship with his or her supervisor; work-life balance; opportunities for growth and personal development; adequate training; challenging work; a feeling of a valuable asset for an organization (Gostick and Elton, 2007). Employees value opportunities for learning and creativity more than salary, flexible working hours, vacation, perks etc. The talent pool so created and developed can be deployed to pivotal roles in an organization depending on the role expectations. The organization should conduct a regular training programme for the employees and allot mentors to talk to the employees about their performance.

Retaining talent

Retaining the trained and competent talent pool is more important than developing it. Employee retention is closely linked to an organization's performance management system and that a compensation package should clearly communicate expectations of performance, skill requirements, experience, and behavior (Phillips & Roper, 2009). Performance Management system has an ability to challenge and motivate employees, therefore people and strategy should be linked to performance. As per Bhatnagar (2007), the major reasons for employee turnover were poor communication within an organization, discomfort with the culture and dissatisfaction with the kind of career path available to them. There is a need for

an organization to mitigate the 'push' factors (those which makes an individual to leave) and make 'pull' factors (offers made by external firms), a difficult decision to consider (Mayo, 2018).

Succession planning remains a crucial factor in many hotels and restaurants. Succession planning involves clearly defining the necessities and inevitable competencies for key positions and then identifying the employees, who could be developed to fill these positions in the future (Clunies, 2004). As per Barlow, (2006), Talent management could be seen as new jargon for succession planning. Effective succession planning systems are based on well defined competencies and reliable information about the current performance and potential of employees (National Academy of Public Administration, 1992). Succession planning should focus more specifically on effective talent assessment and compel managers to look at employees, who are ready for the roles. To ensure that this is a fair and effective process, decisions should be based on systematic analyses of: (1) job requirements (both current and projected) of different level positions, and (2) the current performance levels and potential of employees in the pipeline to fill those positions.

Executive leadership is very important to the effectiveness of all organizations. The quality of the senior executives clearly affects the performance of the organization and the motivation and satisfaction of employees (Lawler, 2008). Effective leadership at all levels is the best source of motivation and culture that makes human capital a competitive advantage. Moreover, leaders are the main drivers of organizational success by being the sole strategic decision-makers. In order to develop leaders within organizations, effective talent management practices become crucial.

Service innovation "introduces something new into the way of life, organization, timing, and placement of what can generally be described as the individual and collective processes that relate to consumers" (Barcet, 2010). As a result of continuous innovation, the hospitality industry has improved its service quality and offers a more customized experience, such as predicting customer needs and wants, increasing loyalty through, expanding customer base, and increasing efficiency and productivity (Bilgihan, & Nejad 2015). Although the hospitality industry is still slow in adopting new technologies, early adoption will help increase operational efficiency and create more value for customers.

Attrition algorithm for potential Recruitment/ Employee Attrition

In order to validate the above model, we have shown an analysis for a given dataset between 30 to 55 age groups of employees. With the help of the attrition algorithm, we have demonstrated how to measure employee attrition and make the prediction for existing employees. The forecasting algorithm always helps an organization to have more employee retention and select only suitable potential candidates.

Source Code using Python for Data driven Employee Attrition

```python
#import the libraries
import numpy as np
import pandas as pd
import seaborn as sns
#load data
from google.colab import files
uploaded = file.upload()
**/#browse the .csv file and upload
#store data into dataframe
df = pd.read_csv('file_name')
#print the data (mention row no.s)
df.head(row_no.)
#get the column data types.
df.dtypes
#view some statistics.
df.describe()
#show number of employees left by age
import matplotlib.pyplot as plt
sns.countplot(x='age' hue='attrition')
```

Figure 5: Descriptives

EmployeeID	orighiredate_key	age	department_name	job_title	gender_full	termreason_desc	termtype_desc	STATUS_YEAR	STATUS	BUSINESS_UNIT
1318	8/28/1989	52	Executive	CEO	Male	Not Applicable	Not Applicable	2006	ACTIVE	HEADOFFICE
1318	8/28/1989	53	Executive	CEO	Male	Not Applicable	Not Applicable	2007	ACTIVE	HEADOFFICE
1319	########	50	Executive	VP Stores	Female	Not Applicable	Not Applicable	2007	ACTIVE	HEADOFFICE
1319	########	51	Executive	VP Stores	Female	Not Applicable	Not Applicable	2008	ACTIVE	HEADOFFICE
1795	7/23/1951	55	Dairy	Dairy Person	Female	Not Applicable	Not Applicable	2006	ACTIVE	STORES
1795	7/23/1951	56	Dairy	Dairy Person	Female	Not Applicable	Not Applicable	2007	ACTIVE	STORES
5980	9/13/1976	34	Dairy	Dairy Person	Female	Not Applicable	Not Applicable	2010	ACTIVE	STORES
5980	9/13/1976	35	Dairy	Dairy Person	Female	Not Applicable	Not Applicable	2011	ACTIVE	STORES
6601	########	29	Processed Foods	Shelf Stocker	Male	Not Applicable	Not Applicable	2010	ACTIVE	STORES
6601	########	30	Processed Foods	Shelf Stocker	Male	Not Applicable	Not Applicable	2011	ACTIVE	STORES
8231	########	21	Customer Service	Cashier	Male	Layoff	Involuntary	2015	TERMINATED	STORES
8258	5/28/1994	21	Dairy	Dairy Person	Male	Layoff	Involuntary	2015	TERMINATED	STORES

Figure 6: Employee attrition age graph for given dataset
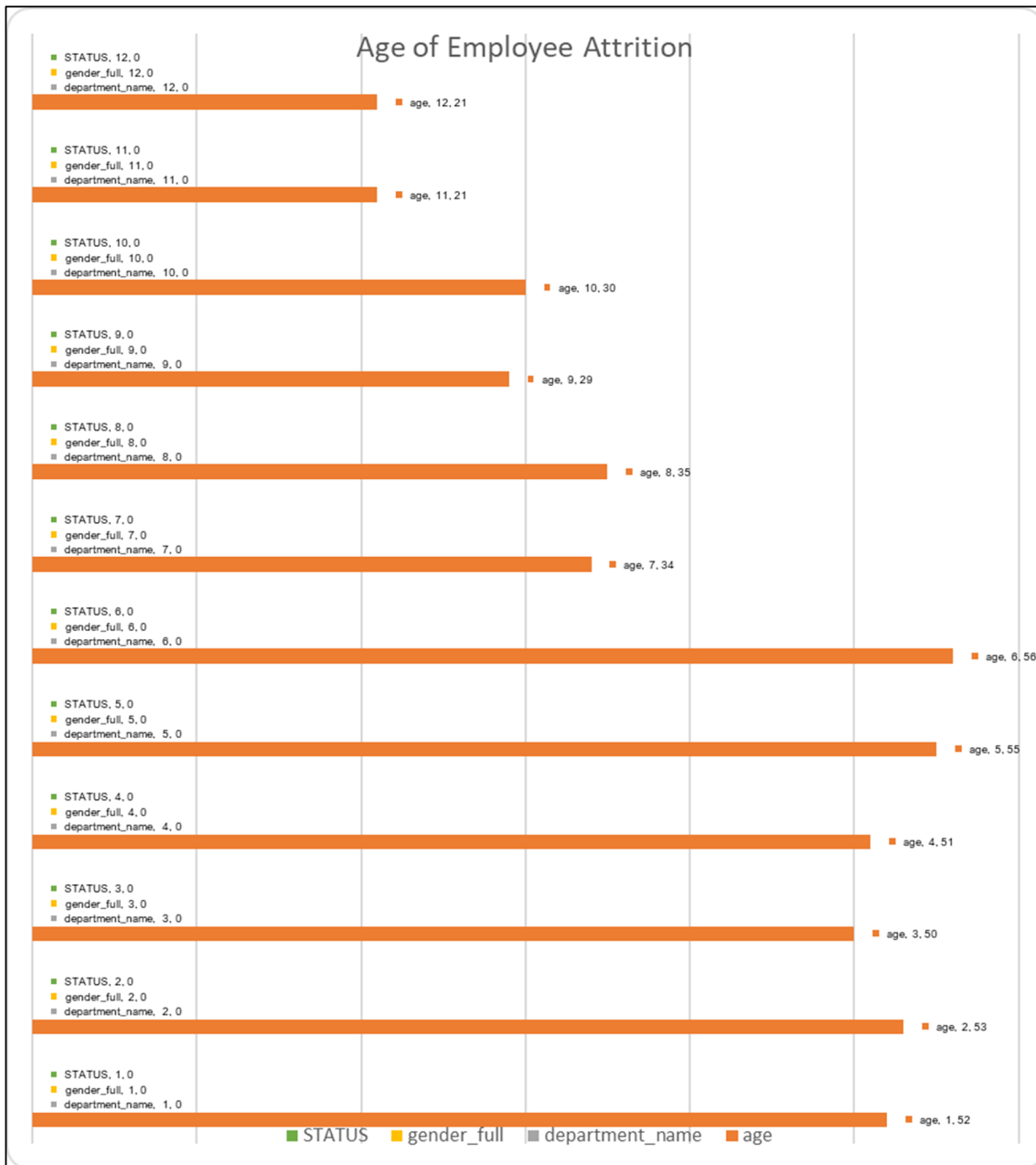
Source: Author compilation

After the data prediction and visualization its showing 50+ age group employee shad opted for voluntary retirement attrition. It can easily be concluded that the number of layoffs are very less. For the given data set the employee retention percentage is high and with the help of analytics company can hire trustworthy employees.

CONCLUSION

In HRM, poor decision-making regarding selection, performance assessment, and lay-offs often result in resentment, low levels of commitment, higher turnover rates, loss of productivity and revenue, and damage to the employer's reputation (Cheng, 2017). The talent gap is huge in the hospitality sector at all levels. According to a Cushman and Wakefield report, the current supply of professionally-trained manpower in the hospitality sector is only 8.92% of the total requirement. This shortage of skilled manpower poses a threat to expansion plans for big hospitality groups that are expanding fast within India's tier-II and tier-II cities and rural areas. Therefore, the educators of entrants to the hospitality industry in India have an important role in shaping perceptions of work in the industry and developing the management abilities of students, in delivering the series of actions that together make up Talent management strategy and recruitment, development, and retention policies (Maxwell, 2008).

There is no doubt that talented people are the most valuable resource of an organization. The management sets goals, processes, and HR metrics for tracking their progress towards the goals. Successful organizations know that exceptional business performance and competitive advantage are driven by superior talent. Employees who are positively engaged have higher levels of productivity and profitability, better safety, lower absenteeism rate, high morale, and higher retention levels. The organization should use proactive strategies to combat talent management's challenge at every step, starting from hiring. The proposed model on Talent management can solve the problems of high attrition if implemented successfully. The concept of HR analytics can be applied at all four phases of the Talent management model to manage big data.

Many organizations consider the HR department as a value-added business partner. So, every enterprise needs to learn how better managed overall HR productivity and services start from hiring, compensation, benefits, training, and development to employee retention. With the help of HR analytics software tool that's Data Analytics and Machine Learning enabled can show an outstanding result for every step in HR Management. Apart from the Employee Attrition algorithm, we can apply the same logic while recruiting new staff members by gathering their previous work experience data, behavioral data from social media profiles. The machine learning concept will analyze who would be a suitable candidate for that particular position.

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