

**CHAPTER:SIX
CONCLUSIONS,
RECOMMENDATIONS
AND SUGGESTIONS**

CHAPTER: SIX:
CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS OF THE RESEARCH STUDY
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CHAPTER-SIX:

CONCLUSIONS,RECOMMENDATIONSANDSUGGESTIONSOFTHERESEARCHSTUDY

6.0:INTRODUCTION

The survey conducted by Right Management- Manpower Group in 2014 sheds light on a prevalent concern among employers worldwide: the lack of skilled talent for key positions. This concern is consistent across regions, but it is particularly urgent in the Asia Pacific region, where rapid economic expansion presents challenges in sourcing the necessary talent to support business strategies. India, in particular, experienced a deficit of approximately 30% in skilled talent for crucial roles.

The shortage of skilled talent poses significant challenges for organizations globally. Not only does it hinder recruitment efforts, but it also affects leadership pipelines and the availability of required competencies. One critical area of concern is the grooming and cultivation of talent for leadership roles. The ability to translate strategic plans into tangible outcomes requires individuals with specific skills, and organizations struggle to find such talent. The responsibility for talent management is no longer solely placed on the Human Resources department. Scholars and practitioners increasingly advocate for senior management members to take part in ensuring the presence of suitable talent when needed. The influence of talent extends to all significant decisions made at the executive level, commonly known as the C-Suite. Accessing, mobilizing, and cultivating appropriate talent is crucial for achieving organizational objectives, regardless of geographical location.

Organizations that fail to maintain talent initiatives may face severe consequences, such as a shortage of skills required for business progress. The lack of competent individuals to assume leadership positions results in a talent deficit that can significantly impact business operations.

Overall, the survey highlights the importance of talent management in addressing the skills gap and emphasizes the need for a collaborative effort from senior management to ensure the availability of suitable talent for organizational success.

The emphasis on talent acquisition and development in organizations has increased significantly, with a focus on cultivating Human Age leadership qualities. Leaders of the future need to acquire and refine new competencies to navigate modern complexities, both in business and managing individuals and groups. They will act as information curators and team coaches, possessing strategic and tactical thinking, as well as conceptual and action-oriented approaches. These leaders will be adept at anticipating and responding to various situations while exploring new possibilities. Competency management is a strategic approach that involves identifying and assessing the knowledge, skills, abilities, experiences, motivations, and personality traits required for an organization's workforce to achieve current and future strategic objectives.

By fostering innovation, engagement, and retention, well-designed competency models provide precise criteria for improving performance management, talent assessment, recruitment, development, redeployment, succession management, and promotion systems within the organization.

The objective of this research is to explore and suggest talent management strategies grounded in Competency-Based HR Functions. The study aims to shed light on how organizations can proficiently recognize and cultivate competencies to nurture and enrich talent within their workforce. By focusing on developing competencies and integrating them with human resources strategies, the study will offer valuable insights into the design and execution of effective talent management strategies. The ultimate goal is to achieve favorable outcomes and elevate the overall workforce quality, enabling organizations to flourish in an ever-changing and dynamic work environment.

6.1 : ORGANISATION OF THE Ph.D. THESIS:

The PhD thesis has been organized into six chapters as follows.

Chapter One: Reviewing Manifestations of Talent Management & Competency-based HR Functions (Competency Management)

Chapter Two: Review of Literature

Chapter Three: Research Methodology

Chapter Four: Data Analysis & Interpretation of the Research Study Chapter

Five: Findings and Implications of the Research Study

Chapter Six: Conclusions, Recommendations & Suggestions of the Research Study

6.2 : A BRIEF ABOUT THE RESEARCH STUDY:

The researcher aimed to investigate a range of managerial, technical, and behavioural competencies exhibited by employees at different hierarchical levels (top, middle, and lower) within diverse manufacturing sectors in Gujarat. A study was conducted to examine the influence of Competencies based HR Functions on Talent Management functions, specifically Talent Acquisition, Talent Development, and Talent Retention, within selected four key sectors in the manufacturing industry in Gujarat. The researcher's primary focus has been on four sectors within the manufacturing industry of Gujarat State: the Agro & Food Processing Industry, Oil & Gas, Pharmaceuticals & Biotechnology, and the Chemical & Petrochemical Industry (Gujarat, 2010). The primary objective of the researcher is to develop a theoretical framework that investigates the connection between competencies, HR functions based on competencies, and talent management. The researcher will also strive to examine the potential mediating role of Competency-based HR functions concerning Talent Management practices & competencies within the organisation.

TableNumber:6.1:
ABriefFactualProfileoftheResearchStudy

Bibliography	
NumberofBooksReferred	32
NumberofJournalsReferred	162
NumberofResearchPapers Reviewed	256
NumberofResearch Report/Thesis/Dissertation Referred	10
Number of Conference ProceedingsReferred	12
Number of Websites Accessed	80
Name of Search Engines Used	Scopus,ProQuest,JSTOR,GoogleScholar,SpringerLinkandJ-Gate
Nameof Statistical Tools Applied	Frequency Distribution, Percentages, Mean, Proportion, Correlation, Chi-square Test, T-test, Kruskal-Wallis Test, Post Hoc Test, Partial LeastSquare Structural Equation Modeling (PLS-SEM)
Sourcesof Secondary DataUsed	ReferenceBook,Journals,Newspaperarticles,Ph.D.Thesis,Master Dissertation,Workingpaper,Conferenceproceeding,Websites
GroupofHypotheses Tested	07
ResearchDesignUsed	ExploratoryandDescriptiveresearch design
Research Instrument Used	StructuredNon-Disguisedquestionnaire

TableNumber:6.2:	
ABriefFactualProfileoftheResearchStudy	
SamplingDecisions	
Representative Sample	Selected employees who are working in companies which have more than 100 employees in their company and belong to the four key sectors of the manufacturing industryofGujaratStateViz.Agro&FoodProcessing,Oil&Gas,Pharmaceuticals &Biotechnology,andChemical&Petrochemicalindustries.
SamplingDesign	Non-ProbabilitySamplingDesign
SamplingMethod	ConvenientandJudgmentalsamplingmethod
SamplingFrame	Summary result for the factory sector- ASI-2019-2020)(INDIA, 2019), and Estimate of Employees other than a worker(Supervisory & managerial & other Employee) in thefactorysectorby theirtypeforeach 3-digitIndustrygroup(NIC-2008)forGujarat State(GOVERNMENT OFINDIAetal.,2019)
SampleSize	548Employeesfromselectedfourkeysectorsofthemanufacturingindustryof Gujarat state(161- Agro& Food Processing Industry,147- Oil & Gas Industry, 145- Pharmaceuticals & biotechnology industry, 95- Chemical & Petrochemical industry)
SamplingMedia	StructuredNon-DisguisedQuestionnairefilledupthroughElectronicformatand supportedwiththehelpofpersonalinterviewswiththeselectedSeniorEmployees.
DetailsofModel	SHLUniversalFrameworkofCompetencies,IceBergModelofCompetency,ATD modelfortalent Management
NumberofTables in Ph.D.Thesis	101
NumberofGraphsin Ph.D.Thesis	62
NumberofFigures in Ph.D.Thesis	09

6.3: RESEARCH METHODOLOGY:

The researcher endeavoured to concisely summarise the research methodology's methodological, procedural, and conceptual components. The research process encompassed several vital components, which were systematically addressed. These components included the initial clarification of fundamental terminology, the elucidation of the study's rationale and scope, the explication of the research design, the articulation of objectives and research inquiries, the formulation of hypotheses, the construction and application of a conceptual model, the identification of secondary data sources, the design of the sampling procedure, the analysis and interpretation of primary data, the presentation of research findings, the discussion of the implications and outcomes, and the provision of recommendations and suggestions.

The researcher also acknowledged the inherent constraints of the study and offered recommendations for future researchers to undertake analogous investigations.

The researcher has tried to present the findings using various statistical tools and techniques to draw conclusions and clarify important theoretical and managerial implications in this research study. The utilisation and implementation of correlation analysis have yielded valuable insights into the relationship between individual employees' Competency & Talent Management practises. The correlation analysis investigated the associations between Competency-based HR functions and Talent Management. The researcher employed the Chi-Square Test to evaluate the association between the selected employees' background variables and their responses about their awareness and implementation of competency-based HR functions and talent management practices.

The research study's findings are based on the one-way ANOVA test, specifically the Kruskal-Wallis H test, and subsequent post hoc analysis. The statistical techniques were utilised to identify differences in the responses of employees in the State of Gujarat, classified according to sector and Level of designation. Confirmatory Factor Analysis (CFA) is a widely used statistical method employed to assess the validity and reliability of latent constructs by examining the indicators (items) that comprise them. The study utilised a first-order confirmatory factor analysis (CFA) technique, specifically employing measurement model analysis using partial least squares structural equation modelling (PLS-SEM). The researchers employed a Structural model measurement of the Structural Equation Model (SEM) with Partial Least Squares-SEM (PLS-SEM) to analyse the relationships between the variables in the study. The researcher also aimed to offer extensive implications derived from the results and findings of this research study.

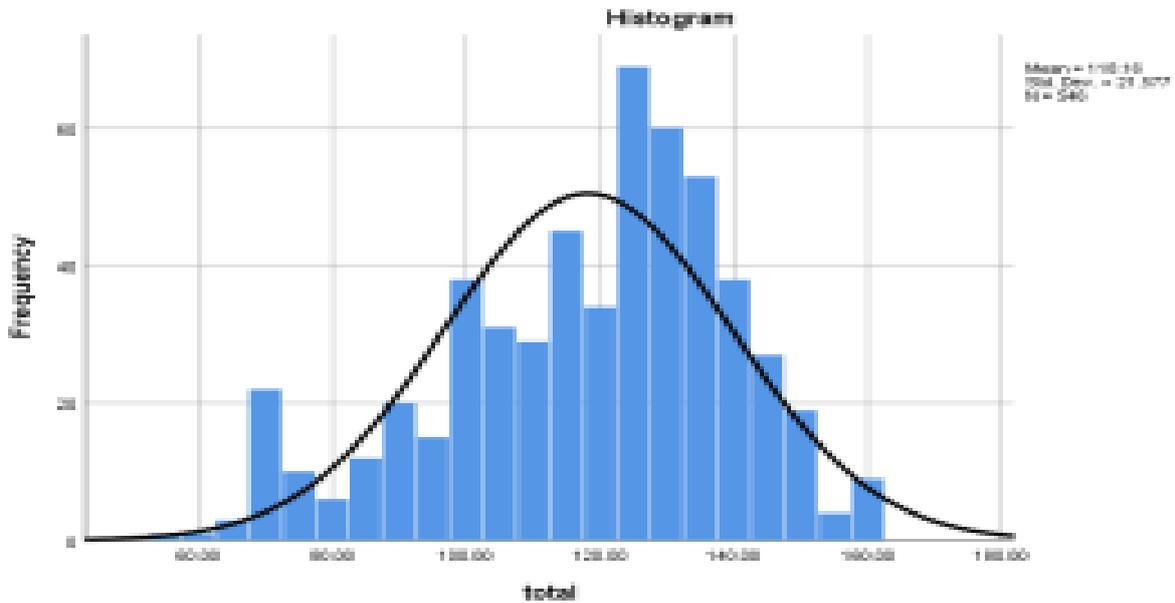
6.4 : Assessing the Normality of the Distribution of the Collected Primary Data:

The researcher made conscientious efforts to evaluate the normality of the primary data gathered by utilising the Kolmogorov-Smirnov Test of Normality, Histogram, and Normal Q-Q Plot. The test results are displayed in Table 6.3, demonstrating statistical significance at a significance level of 5 percent. The distribution of the primary data demonstrates a minor departure from normality, but it closely resembles a normal distribution. A negative skewness value of -0.567 and kurtosis values of -0.265, as documented in Table 6.4 and Graph 6.1, provide clear evidence for this assertion.

Table Number: 6.3				
Kolmogorov-Smirnov Test of Normality				
Sr. No.	Factors	Test Statistic	df	P-Value
01	Managerial Competency	0.179	546	.000c
02	Behavioural Competency	0.187	546	.000c
03	Technical Competency	0.233	546	.000c
04	Competency-Based HR Function	0.106	546	.000c
05	Talent Acquisition	0.093	546	.000c
06	Talent Development	0.097	546	.000c
07	Talent Retention	0.114	546	.000c
08	Talent Management	0.258	546	.000c
Note: c. Lilliefors Significance Correction.				

The subsequent histogram illustrates the distribution of employees sampled from four prominent sectors within the manufacturing industry of Gujarat State. The frequency of cases is represented on the vertical axis. In contrast, the horizontal axis represents the midpoints of value ranges that correspond to the total scores provided by employees for Competency-based talent management practices in their respective industries. Based on the examination of the histogram (Graph Number 6.1), it can be inferred that the data demonstrated a minor negative skew. The analysis of the descriptive statistics table and the Q-Q Plot (Graph Number 6.2) reveals that the primary data collected closely approximates a normal distribution.

GraphNumber: 6.1:
HistogramShowingDistributionofData

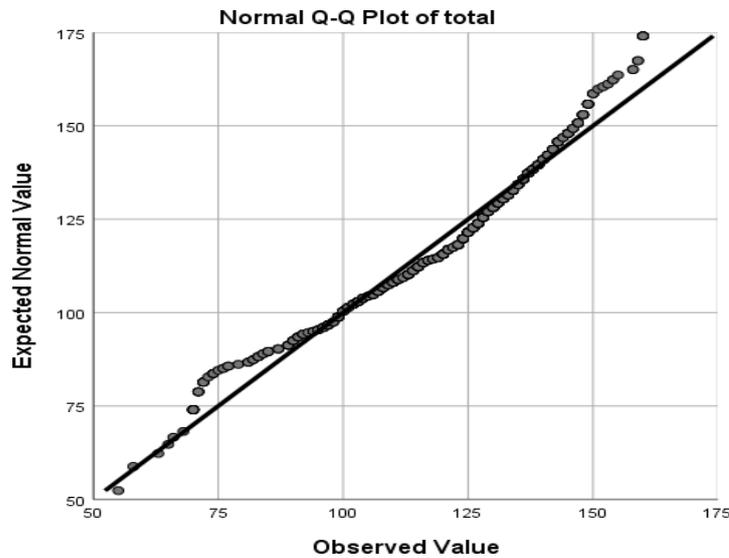


The researchers calculated the skewness of the primary data to be -0.567 and determined the kurtosis to be -0.205. Table 6.4 displays the values of skewness and kurtosis. When a distribution perfectly adheres to the characteristics of a normal distribution, both the skewness and kurtosis values of the distribution are equal to zero. Positive skewness values indicate a right-skewed distribution, while positive values for kurtosis indicate a leptokurtic distribution. A skewness value less than zero indicates a negative skew, while kurtosis values less than zero suggest a more platykurtic distribution. The above distribution often demonstrates non-normality, with a negative skewness value of -0.567. Furthermore, the observed distribution exhibits a more uniform shape, as evidenced by a kurtosis coefficient -0.205.

TableNumber:6.4			
Descriptive Values for Normality Test of employees			
Particulars		Statistic	Std. Error
Mean		118.1612	.92342
95percentConfidence Interval for Mean	LowerBound	116.3473	95percentConfidence Intervalfor Mean
	UpperBound	119.9751	
5percentTrimmed Mean		118.9351	
Median		123.0000	
Variance		465.578	
Std. Deviation		21.57725	
Minimum		55.00	
Maximum		160.00	
Range		105.00	
InterquartileRange		30.00	
Skewness		-.567	.105
Kurtosis		-.205	.209

GraphNumber: 6.2:

Q-Q Plot of the Normality of the Distribution of Data of employees



6.5: A BRIEF ABOUT THE STRUCTURED NON-DISGUISED QUESTIONNAIRE:

The researcher developed the structured, non-disguised questionnaire with input from a review of the existing literature, and pilot-testing was done with information from employees. The draft of the non-disguised structured questionnaire was revised based on this feedback.

6.5.1: Reliability Test of the Structured Non-Disguised Questionnaire:

The researcher employed Cronbach's Coefficient Alpha, the average of all the split-half correlation coefficients, to examine the reliability of the various questionnaire constructs, which was found to be high with a comprehensive reliability score of 0.869, exceeding the widely accepted benchmark of 0.8, indicating a "Good" level of reliability. The study utilized Cronbach's alpha coefficient, which ranges between 0 and 1, to evaluate the internal consistency among the items in the questionnaire. A higher value of Cronbach's alpha indicates better internal consistency. However, there is no established minimum threshold for this coefficient. Following guidelines proposed by George & Mallery (2003), a rating scale was used to evaluate the performance of the reliability score. A score of 9 was considered exceptional, 8 as good, and a score of 7 was regarded as acceptable. The performance rating given to the questionnaire was 5, which is considered unsatisfactory and below the statistical significance threshold. The study also evaluated the reliability of specific factors within the questionnaire. The Cronbach's Alpha coefficients for the selected factors ranged from 0.546 to 0.905. While the Talent Acquisition factor surpassed the established threshold of 0.5, the remaining factors showed acceptable levels of internal consistency and met the criteria for reliability. In summary, the structured questionnaire used in the research study demonstrated a high level of internal consistency, with most factors showing acceptable reliability. However, the Talent Acquisition metric fell slightly below the threshold, which may require further investigation and improvement.

Sr.No.	Selected Criteria	Cronbach's Alpha Co-efficient
01	Competency	0.905
02	Competency-based HR Function	0.861
03	Talent Acquisition	0.546
04	Talent Development	0.647
05	Talent Retention	0.771
06	Talent Management	0.885
Overall Reliability of all Criteria		0.869

6.5.2: Validity Assessment Test of the Structured Non-Disguised Questionnaire:

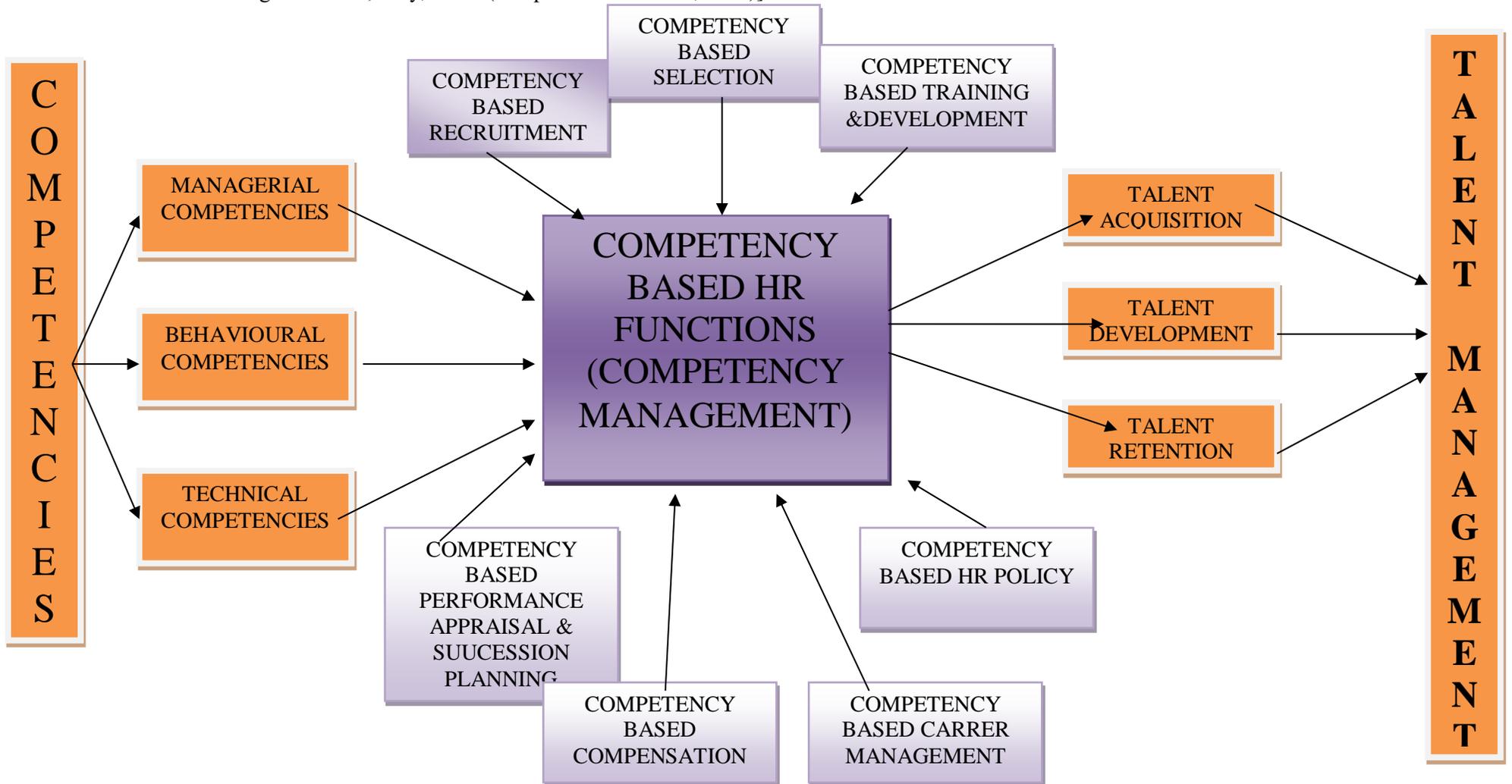
TableNumber:6.6 ComparisonofMeanScoresofExperience/SatisfactionfromSelected Employees from four Key sector of Gujarat’s Manufacturing Industry.				
Selected Employees OpinionwithrespecttoCriteria. RatingScale1[Strongly Disagree]to5[Stronglyagree]		Selected Employees OpinionwithrespecttoCriteria. RatingScale1[HighlyDissatisfied]to5[HighlySatisfied]- Overall responses towardsselectedCriteria		Difference inMeanCou nt [ColumnB- ColumnD]
AverageScore	Mean Score	AverageScore	Mean Score	MeanScore
	(Rank)		(Rank)	(Rank)
A	B	C	D	B-D
ManagerialCompetencies	3.44	OverallCompetencies	3.65	-0.21
BehavioralCompetencies	3.62			-0.03
TechnicalCompetencies	3.76			0.11
CompetencyBased Recruitment	3.66	CompetencybasedHR Functions	3.70	-0.04
Competency-basedSelection	3.66			-0.04
Competency- basedTraining&development	3.66			-0.04
Competencybased PerformanceAppraisal& Succession Planning	3.81			0.11
Competencybased Compensation	3.63			-0.07
CompetencybasedHRpolicy	3.73			0.03
CompetencybasedCareer Planning	3.77			0.07
TalentAcquisition	2.981	TalentManagement	3.240	-0.25
TalentDevelopment	3.613			0.37
TalentRetention	2.975			-0.26
OverallAverage	3.93	OverallAverage	3.98	-0.06

The researcher measured validity by comparing mean scores of scales with other measures of the same construct. The results of the validity are revealed in Table Number 6.6. The mean of the same construct was measured, and less variation was found in the given question categories and overall responses towards the major Criteria score. The majority of the Employees’ Opinions were found between Strongly Agree to Neutral. Thus, different constructs of the questions fulfill the condition of validity.

6.6 :CONCEPTUAL MODEL:

Figure:6.1 THE CONCEPTUAL MODEL OF THE RESEARCH STUDY

[Proposed Model is adapted & modified from ANITHA KUMARI PINAPATI, 'Competence Management as a Tool of Talent Management- A Study of Practices in Indian Organizations', May, 2011 (Pinapati & Vanka Sita, 2011)]



6.7: PROFILE OF THE SELECTED EMPLOYEES OF THE RESEARCH STUDY:

The profile of selected employees is presented in Table Number 6.6

Table Number: 6.7: Profile of Selected Employees (Number & Percentages)					
	Agro & Food Processing Industry	Oil & Gas Industry	Pharmaceuticals & biotechnology Industry	Chemical & Petrochemical industry	Total
Age Groups (In Years)					
18 to 24	4(17.39)	7(30.43)	7(30.43)	5(21.74)	23(4.21)
25 to 34	53(29.78)	41(23.03)	54(30.34)	30(16.85)	178(32.60)
35 to 54	68(28.22)	68(28.22)	59(24.48)	44(18.26)	241(44.14)
55 & above	36(33.96)	31(29.25)	24(22.64)	15(14.15)	106(19.41)
Gender					
Male	96(30.87)	83(26.69)	81(26.05)	51(16.40)	311(56.96)
Female	65(27.66)	64(27.23)	63(26.81)	43(18.30)	235(43.04)
Level of Management					
Top-level	88(31.54)	91(32.62)	70(25.09)	30(10.75)	279(51.10)
Middle level	46(25.41)	39(21.55)	54(29.83)	42(23.20)	181(33.15)
Bottom Level	27(31.40)	17(19.77)	20(23.26)	22(25.58)	86(15.75)
Group of Various Department					
Finance, Purchase & sales	18(41.86)	4(9.30)	9(20.93)	12(27.91)	43(7.88)
HRM, Admin, Marketing	56(23.93)	61(26.07)	67(28.63)	50(21.37)	234(42.86)
Production, Plant, Manufacturing	87(32.34)	82(30.48)	68(25.28)	32(11.90)	269(49.27)
Education Qualification					
Post Graduation & above	129(32.66)	117(29.62)	96(24.30)	53(13.53)	395(72.34)
Graduation	30(20.14)	28(31.65)	44(26.62)	37(25.46)	139(25.46)
Under Graduate	2(16.67)	2(16.67)	4(33.33)	4(33.33)	12(2.20)
Experience					
5 Years and above	57(27.54)	55(26.57)	48(23.19)	47(22.71)	207(37.91)
3-5 years	55(28.80)	47(24.61)	57(29.84)	32(16.75)	191(34.98)
0-3 Years	49(33.11)	45(30.41)	39(26.35)	15(10.14)	148(27.11)
Total Number of Employees	161	147	144	94	546(100.00)

The table provides a detailed profile of selected employees across four different industries: Agro & Food Processing, Oil & Gas, Pharmaceuticals & Biotechnology, and Chemical & Petrochemical. It presents data on various aspects, such as age groups, gender distribution, level of management, departments, education qualifications, and work experience.

Regarding age groups, the data indicates that the majority of selected employees fall within the 25 to 34 age bracket across all industries, constituting 32.60 percent of the total workforce. The age group of 35 to 54 is also well-represented, comprising 44.14 percent of the selected employees. In contrast, those aged 55 and above constitute the smallest portion at 19.41 percent.

When analyzing the gender distribution, it becomes evident that male employees dominate the workforce in all industries, making up 56.96 percent of the total selected employees. The Agro & Food Processing Industry has the highest percentage of male employees at 30.87 percent, while the Chemical & Petrochemical Industry has the lowest at 16.40 percent. On the other hand, female employees account for 43.04 percent of the workforce, with the highest representation in the Agro & Food Processing Industry at 27.66 percent.

In terms of the level of management, the majority of employees are at the top-level management positions, accounting for 51.10 percent of the total selected workforce. The Oil & Gas Industry has the highest percentage of top-level management employees at 32.62 percent. In contrast, bottom-level management employees have the smallest share in the Chemical & Petrochemical Industry at 15.75 percent.

The data also sheds light on the various departments in which selected employees work. The Production, Plant, and Manufacturing departments have the most significant representation, constituting 49.27 percent of the total selected employees. The HRM, Admin, and Marketing departments are also well-represented, making up 42.86 percent of the workforce.

Education qualifications of the selected employees indicate that a substantial portion of the workforce holds Post Graduation and above qualifications, with 72.34 percent falling into this category. The Agro & Food Processing Industry has the highest percentage of employees with such qualifications at 32.66 percent, while the Chemical & Petrochemical Industry has the lowest at 13.53 percent.

Finally, looking at the experience of selected employees, the data shows that 5 years and above experience is the most common category, making up 37.91 percent of the total workforce. The Agro & Food Processing Industry has the highest percentage of employees in this category at 27.54 percent, while the Chemical & Petrochemical Industry has the lowest at 22.71 percent. Employees with 3-5 years of experience constitute 34.98 percent of the workforce, and those with 0-3 years of experience account for 27.11 percent.

In summary, the data from Table Number 6.7 provides valuable insights into the demographic and professional characteristics of selected employees in different industries. It highlights the predominant age groups, gender distribution, management levels, departmental distribution, educational qualifications, and work experience of the workforce. Such information is essential for businesses and policymakers to understand the workforce composition and make informed decisions for recruitment, training, and overall organizational development.

6.8: KEY RESULTS OF THE RESEARCH STUDY:

6.8.1: Demographic Profile

Researchers looked at the Gujarat State manufacturing industry's description and codes from the three-digit Industry (NIC-2008) in order to make their company selections (Gujarat Annexure-V- Description & codes for 3-Digit industry) (GOVERNMENT OF INDIA et al., 2019).

A total of 548 employees were surveyed for this study; 161 of them work in the agro-food processing industry (within industry codes 105-108-110), 147 work in the oil-and-gas industry (within industry codes 192,201,352), 145 work in the pharmaceuticals-and-biotechnology industry (within industry codes -210), and 95 work in the chemical-and-petroleum sector (within industry codes -202). From this data, we may infer that 29 percent of the workforce is associated with the agribusiness and food processing sector, 27 percent with the oil and gas sector, 26 percent with the pharmaceutical and biotechnology sectors, and 17 percent with the chemical and petrochemical sectors.

In the case of the age group, the majority of Employees are between 35 to 54 years, i.e. around 44 percent of overall data; following this, about 32 percent of employees are between the age group of 25 to 34 years. This shows that all industries have a good number of Millennials (Gen-Y), as well as Gen-X (Baby-bust), and only around 19 percent of employees are Boomers II (Baby-boomers) generation. The data infer that all industries have an adequate number of experienced as well as enthusiastic staff. Whereas very few, only nearly 4 percent of employees are from Gen-Z, 18-24 years of age. The study is concentrated more on managerial-level people, so it can be concluded from the age group data that very few young people can directly reach managerial-level experience. According to the findings for gender distribution, the vast majority of respondents are male (i.e., around 56.96 percent), whereas just 43.04 percent of respondents identify as female. Hence the purpose of this research is to focus on employees who occupy management positions inside the organisation. This researcher has subrogated three levels of managerial activities: top, middle, and bottom. Employees who hold a senior position and are involved in policy making and authorised to make significant decisions are included in the Top Level of Managerial Activities. Employees who are involved in decision-making as support staff or heading any department-level activities are included in the Middle-Level managerial activities, and employees who are supervisors or team leaders who lead small teams of the organisation are included in the Bottom Level Managerial Activities. In this instance, about 51 percent of the study's data consists of employees from the top level of the business, while 33 percent of respondents are from the middle level and 15 percent are from the bottom. The results of the research may be generalizable to all levels of an organisation, although they will be more prognostic for top-level employees of Manufacturing Industries. From this data set, it can be interpreted that although the Chemical & Petrochemical industry has less number of employees compared to the other three industries but has a relatively even and proportional distribution of people throughout the three categories of management activities.

Departments serve as the backbone of every company. Every company's Departments reveal both its material and immaterial aspects. A study has divided these sections into three distinct categories. Departments that directly or indirectly affect the company's financial standing are grouped as Group A. Group A in this analysis includes all employees from the accounting, purchasing, and sales departments. Human Resources, Administration, and Marketing staff comprise the bulk of Group B, which consists of departments that aid in formulating organisational policy and ensure its efficient operation. Group C, on the other hand, is made up of all the operational units that are directly involved in making the products, which includes employees of the Production, Plant, and Manufacturing departments.

The majority of Employees are from Group C, i.e., the Production, Plant & manufacturing departments, which is around 49 percent; near to it, 42 percent of employees belong to Group B, which is a combination of Administration, HRM & marketing Departments; while only 7 percent of employees are from Group A, i.e. Finance, Purchase & Sales department. This study can be generalised for two Groups, Group B & C, as more than 90 percent of the overall study area belong to these two groups; Group B consists of the departments that support the organisation's policy-making and efficient operation, focusing on HRM, Admin, and Marketing staff. Since 42 per cent of all employees belong to this category, this research may benefit those engaged in the policy-making process and are accountable for the organisation's proper functioning for making better Talent Management Policies for Organisations. The educational qualifications of selected Employees from these selected manufacturing industries of Gujarat State reveal that the majority of employees, approximately 72 percent, have a postgraduate degree or higher. In comparison, 25 percent of employees have a graduate degree, and only 2 percent of employees have an undergraduate degree. In this 2 percent, most of the individuals are baby boomers, and they have been working in the companies for more than decades. Researchers may infer that all sectors have well-qualified personnel with graduation and post-graduation degrees, although the majority of workers have postgraduate degrees and above, indicating that all industries are rich in educational qualifications. A study revealed that they are baby boomers with experience of more than decades. The years of service of Selected Employees and the data set shows that almost 73 percent of all Employees have more than three years of service, up to 29 years. Moreover, 27 percent of workers have been with the company for less than three years.

6.8.2: Selected Employees' Responses towards Awareness & Identification of Competency:

The researcher has supplied information on awareness and Identification of Competence in this area. Competence is one of the well-defined notions in literature. Still, it is fraught with ambiguity in the real world, particularly its precise meaning and how it contributes to individual and organisational growth. In the study, Competency is a key area that leads to Talent Management Practices; the researcher asked a direct question about awareness of Competency and got two types of results; Majority of respondents, around 79 percent, are aware of the competencies; some respondents know the use and applications of Competency, but they don't know what exactly mean by Competency; these type of respondents were put into another category "Keen to aware"; about 21 percent of respondents are not aware of what Competency is. The results revealed that almost three-quarters of respondents are aware of and interested in learning more about competences, while the remaining one-quarter are not. Further analysis revealed that respondents who marked "unaware" were also able to answer questions about specific competencies like "Communication Skills," "Learning," and "Interpersonal Skills," among others; this suggests that respondents who marked "unaware" are actually familiar with the concept of "Competency," but are simply unfamiliar with its terminology.

The answer to the question "Who Determines Organisational Competencies?" More than half of the individuals who responded, approximately 52 percent of the total data set, selected HR Manager.

Following that, 30 percent of individuals selected the Department Head. 13 percent of workers are in agreement that their Supervisor is the one who determines their competencies. However, only 3 percent of individuals who responded selected staff. This leads one to the conclusion that all industries have robust HR departments in their respective companies because the vast majority of the research found that managerial and behavioural competencies should be identified by the HR or personnel department of companies, and other major responses are given to departmental heads, who are also good for identifying technical competencies in the organisation, according to the research. On the other hand, very few people responded that supervisors should be responsible for identifying technical competencies, and the majority of these respondents came from lower-level management. Who is responsible for and puts their primary attention on the technical parts of the task.

6.8.3 : Selected Employees' responses towards various Competencies:

The research conducted focused on assessing various skill sets and competencies in different industries, particularly in relation to communication, organization awareness, behavior, and technical abilities. The study involved employees from the agro and food processing industry, oil and gas industry, pharmaceuticals, and biotechnology industry, and the chemical and petrochemical industry.

Regarding communication skills, the findings revealed that while more than half of the respondents claimed to have command over communication skills, a significant portion of employees expressed ambiguity or disagreement about their communication abilities. The oil and gas industry showed a strong positive response to communication skills, indicating a clear emphasis on developing this competency. However, the pharmaceuticals and biotechnology sectors struggled in this area, with many employees lacking confidence in their communication skills. Managers and policymakers in these industries need to focus on enhancing communication skills to improve cohesion and effectiveness among their workforce.

In terms of organization awareness and information seeking criteria, a majority of respondents displayed a comprehensive understanding of their organization's vision, mission, and business objectives. The oil and gas industry again stood out positively in this regard, while the pharmaceuticals and biotechnology industry had the largest proportion of employees lacking a thorough understanding of their organization's goals. This indicates a need for better communication and information dissemination within these sectors.

The behavior competency skill set encompassed interpersonal skills and relationship-building abilities. The oil and gas industry demonstrated a high percentage of employees who were skilled in this area, while the pharmaceuticals and biotechnology industries had the lowest number of individuals agreeing with these competencies. Managers in these sectors should focus on cultivating strong relationships and conflict resolution skills among their teams to foster a cohesive and united workforce.

Moving to technical competencies, flexibility, learning, initiative, and quality concern were analyzed. The oil and gas industry excelled in flexibility and learning competencies, while the chemical and petrochemical industries struggled the most in these areas.

Organizations need to ensure their employees are adaptable and eager to learn, especially in an ever-changing business environment. Additionally, measuring work, making improvements, monitoring quality, and maintaining accuracy were essential technical competencies. The agro-food processing industry displayed the highest rate of employees valuing quality, while the oil and gas industry had the lowest number of individuals who disagreed with these competencies. The chemical and petrochemical industries should focus on establishing a greater emphasis on quality within their organization.

Lastly, the study assessed employees' willingness to work for the company, finding that the oil and gas industry had the highest percentage of enthusiastic workers, while the pharmaceuticals and biotechnology industry had the highest number of negative respondents. Managers in the latter industry need to concentrate on fostering a more proactive and enthusiastic workforce.

Overall, the research underlined the importance of various competencies in different industries and provided insights into areas that require improvement. Managers and policymakers in the pharmaceuticals and biotechnology, chemical and petrochemical industries should focus on developing communication, behavior, and technical competencies to enhance the overall effectiveness and success of their organizations.

6.8.4 : Selected Employees' responses towards Competency-based HR Functions:

The research study focused on exploring Competence and Competency-based HR functions, which are critical constructs in the study. The researcher created seven sets of HR functions that incorporated competencies, and respondents were asked in-depth questions related to these functions. The first aspect examined was competency-based recruitment, where 63 percent of respondents agreed to have this approach in their organizations. However, 20 percent were against it, and 16 percent were unaware of its existence. The Agro & Food industry had the highest positive response rate (66 percent), while the Pharmaceuticals and Biotechnology sector had the highest negative response rate (25 percent), indicating a need for revising their recruitment strategies.

The next aspect was competency-based selection, with 62 percent of employees believing it was incorporated in their organization's process. 19 percent disagreed, and 17 percent were unaware. The Oil and Gas industry had the highest positive response rate (65 percent), while the Agro & Food industry had the highest percentage of employees unaware of these practices (20 percent).

Competency-based training & development was also examined, with 63 percent of respondents stating that their organizations used such approaches. 20 percent disagreed, and 16 percent were unaware. The Agro & Food industry had the highest positive response rate (68 percent), while the Pharmaceuticals & Biotechnical industry had the highest negative response rate (24 percent).

Regarding competency-based performance analysis, 67 percent of employees from selected manufacturing industries agreed with the importance of competencies in evaluating performance. 15 percent disagreed, and 17 percent were unaware. The Chemical & Petrochemical and Oil & Gas industries had positive responses, while the Pharmaceutical & Biotechnical industry had the highest percentage of confused respondents (22 percent).

Competency-based compensation was explored, and the majority of respondents were positive (36 percent were negative or neutral). The Oil & Gas industry had the highest positive response rate (70 percent), while the Pharmaceutical & Biotechnical industry had the highest negative response rate (32 percent).

Overall, 65 percent of respondents agreed with the competency-based HR policy. The Oil & Gas industry had the highest number of positive responses and the lowest number of negative and neutral responses. The Pharmaceutical industry had the highest percentage of negative responses (32 percent).

In terms of career development practices through competency analysis, 60 percent of respondents agreed, while 40 percent did not or were neutral. The Pharmaceutical & Biotechnical industry had the highest positive response rate (78 percent), while the Oil & Gas industry had the lowest (38 percent).

In summary, the findings suggest that competency-based HR practices are generally well-received in the selected industries. However, there are areas of improvement, such as recruitment strategies and career development practices, particularly in the Oil & Gas and Pharmaceutical & Biotechnical industries. The Agro & Food industry performed well in some areas but needs to increase awareness of HR policies. Overall, the research highlights the importance of competency-based approaches in HR functions and the need for continuous improvement to enhance organizational performance and employee satisfaction.

6.8.5: Selected Employees' responses towards Talent Management practices in the organisation:

The study focused on evaluating various Talent Acquisition practices, with a specific emphasis on Competency analysis during the induction phase and throughout the HR process. The results indicated that a majority of respondents (64 percent) affirmed the implementation of competency analysis in all stages of HR, but 21 percent expressed negative sentiments, possibly due to lack of awareness. The oil and gas sector showed the highest positive response to competency implementation. Additionally, approximately 67 percent of employees favored the inclusion of competency analysis during the job description interview and talent identification process.

The study also aimed to assess the perceptions of participants regarding the correlation between talent management and competency. Around 66 percent of respondents believed that this association could enhance the recruitment process, while 14 percent expressed negative views and 18 percent were ambivalent. However, the chemical and petrochemical industry had a concerning 39 percent of employees who responded neutrally, potentially due to a lack of knowledge about the advantages of competency-based talent attraction.

Regarding talent development, a significant proportion of employees (67 percent) agreed with continuous competency improvement practices for talent cultivation and maintenance within their organizations. However, when it came to regularly emphasizing the importance of skill and competency enhancement, the positive response was lower at 57 percent.

Talent retention practices were also evaluated, and 64 percent of employees favored recognition and rewards based on competency analysis. Approximately 63 percent believed that competency-based talent management fosters a culture of autonomy in the workplace, which is beneficial for retention. However, some industries faced challenges in retaining talented employees through competency-based techniques.

Overall, the study highlighted the importance of educating employees about talent development and implementing transparent policies for talent acquisition, development, and retention. While respondents recognized the potential benefits of talent management, there was a need for more commitment and knowledge to fully implement these practices effectively. Policymakers and organizational leaders should prioritize continuous competency enhancement to achieve proficient talent management strategies.

6.9: KEY FINDINGS & IMPLICATIONS OF THE RESEARCH STUDY:

This study employed the Correlation, Chi-Square test, Krushkal Wallis H Test & Post-Hoc Analysis, and Structure Equation Modelling to test the hypotheses. As a result, the study found the following findings, which can be summarized as its key conclusions and implications:

6.9.1: Key findings from Correlation analysis between overall Communication skill, Competency & overall Competency Based HR Functions:

Table Number: 6.8						
Findings of Correlation Between overall Communication skill, Competency & overall Competency Based HR Functions of Selected Employees from four key sectors of the manufacturing industry of Gujarat State						
Sr. No	Selected Constructs	Competency-based HR Functions	Talent Acquisition	Talent Development	Talent Retention	Talent management
01	Communication Skill	-0.050	-0.057*	-0.089**	-0.007	-0.060*
02	Overall Competencies	0.462**	0.256**	0.227**	0.323**	0.305**
03	Overall Competency-based HR Functions		0.417**	0.402**	0.495**	0.511**

The study utilized Kendall's Tau correlation coefficient to examine the relationship between three fundamental competence categories, competency-based human resource functions, and talent management practices. It found a positive correlation between Competency and Competency-based HR Functions, indicating a strong and significant association. However, there was a non-significant and inverse association between communication competencies and competency-based HR tasks. This challenges the notion that effective communication skills are essential for competency-based HR practices. The research emphasizes the need for industries to prioritize enhancing communication skills among their employees. Competency-based HR management is increasingly important in modern society, particularly in Industry 4.0 and beyond, and it positively influences talent acquisition, development, and retention procedures.

6.9.1.1: Implications of the Findings:

Enhancing Communication Skills: The study highlights the insufficiency of manufacturing sectors in Gujarat regarding communication competencies. Industries should invest in improving communication skills among their workforce to tackle future challenges effectively.

Prioritizing Competency-based HR Practices: The adoption of competency-based HR practices can have a notable impact on talent acquisition, development, and retention. Companies should identify and recruit individuals with exceptional skills while promoting ongoing professional development to reduce employee turnover rates.

Strategic Recruitment: Implementing competency-based selection strategies enables the identification and recruitment of individuals with the right skills for specific job positions, leading to improved outcomes for both recruiters and applicants.

Transparent Performance Assessment: The study supports the use of competency-based performance assessment as a transparent and authentic way to evaluate employee performance, linking it to reward and training systems.

Talent Management: The research emphasizes the importance of competency-based talent management strategies in retaining highly skilled individuals and promoting human capital growth.

Competency-based Pay: The implementation of competency-based pay can reward employees who demonstrate exceptional abilities through job performance and organizational contributions, fostering a culture of diligence and decision-making.

Career Development Strategies: Companies can improve talent retention by implementing competency-based career development strategies, addressing the professional growth needs of employees, leading to increased loyalty and longer tenures.

Effective Organizational Integration: Adopting competency-based HR policies facilitates seamless integration of capabilities throughout an organization, enhancing the successful implementation of talent management strategies.

In conclusion, the study highlights the significance of competency-based HR practices and talent management in modern organizations. It stresses the need to prioritize communication skills, strategic recruitment, transparent performance assessment, and competency-based career development to foster employee growth, enhance talent retention, and achieve sustained viability in the rapidly evolving landscape of Industry 5.0.

6.9.2 :Key findings from Correlation analysis between Talent Acquisitions, Talent Development, Talent Retention & Talent Management

TableNumber:6.9		
OverallFindingsofCorrelationBetweenTalentAcquisitions, TalentDevelopment,TalentRetention& Talent Managementof Selected Employees from four key sectors of the manufacturing industry of Gujarat		
Sr. No	SelectedConstructs	Talent management
01	OverallTalentAcquisitionspractices&TalentManagement	0.597**
02	OverallDevelopmentpractices&TalentManagement	0.726**
03	OverallTalentRetentionpractices&Talent Management	0.580**

The study found a statistically significant positive association between talent acquisition and talent management processes. It suggests that as an organization improves its talent acquisition strategies, there will be a corresponding improvement in talent management practices. Talent acquisition involves identifying, recruiting, and selecting individuals with the required qualifications, and it plays a crucial role in enabling organizations to achieve their objectives. The talent acquisition team is pivotal in integrating newly hired individuals into the organizational culture to enhance their productivity and impact. Talent development, which includes effective training programs, is crucial for enhancing employee engagement and work performance. Talent management encompasses deliberate and systematic efforts to nurture and augment individuals' abilities and competencies. Staff retention emerged as a significant concern, and implementing employee retention strategies is crucial for the progress and success of an organization. Organisations must strategically prioritise initiatives such as professional development and employer branding to ensure the successful attraction and retention of highly skilled employees. (Niedzwiecka, 2016) posits that talent acquisition is the preliminary stage within the broader construct of talent management.

6.9.2.1: Implications of the Findings: The findings have several important implications for organizations. First, it highlights the importance of prioritizing talent acquisition and management strategies. Investing in attracting and selecting highly skilled employees will lead to better talent management outcomes, positively impacting overall organizational success.

Second, organizations should focus on talent development to improve employee understanding of their roles and equip them with the necessary skills. By offering effective training programs, organizations can boost employee engagement and work performance while reducing the likelihood of errors and improving overall productivity.

Third, creating customized talent development plans is essential for managing a highly skilled workforce effectively. By offering clear trajectories for professional growth, organizations can promote workplace inclusivity and ensure that employees have opportunities for continuous improvement.

Fourth, the study emphasizes the significance of employee retention strategies. High employee turnover can negatively affect operational efficiency and worker motivation. Therefore, organizations must implement efficient talent retention strategies to maintain a stable and highly skilled workforce, ultimately contributing to successful talent management.

Lastly, organizations that prioritize evaluating their organizational culture and associated benefits can attract and retain talented individuals more effectively. A positive and nurturing work environment fosters personal development and satisfaction among employees, leading to better talent management outcomes.

In conclusion, this study underscores the interconnection between talent acquisition and talent management and emphasizes the importance of strategically prioritizing initiatives such as talent development, employee retention, and fostering a positive organizational culture. By implementing these strategies, organizations can enhance their talent management practices and improve overall organizational performance.

6.9.3 : Key Findings from Chi-Square Analysis :

Table Number: 6.10 Statements Showing Significant & Non-Significant Association of the demographic profile of Selected Employees with Competency, Competency-based HR & Talent Management practices in the organisation							
SR. No.	Selected Factors	Selected Statement for competency & Talent management practices in the organisation	Age	Gender	Designation	Qualification	Experience
01	Managerial Competency	Communication Skill	0.483	0.448	.442	.000 (.257)	.000 (.168)
		Organisation Awareness & information seeker	0.060	.390	.052	.001 (.152)	.170
02	Behavioural Competency	Interpersonal Skills, Relation building Skill	0.705	0.875	.073	.342	.235
		Empathy, Influence & Persuasive	0.362	.988	.035	.000 (.174)	.601
03	Technical Competency	Flexibility	0.090	.288	.021	.001 (.156)	.090
		Learning	.000 (.190)	.570	.060	.000 (.172)	.006
		Create your own Measure of Excellence & Quality Concern.	0.036	.064	.084	.000 (.214)	.000 (.179)
		Initiative	0.097	.531	.010	.000 (.261)	.009
04	Competency-based Recruitment	The organization identifies vacancies & job descriptions with the help of competency analysis.	.001 (.145)	.241	.118	.000 (.207)	.001 (.159)

05	Competency-based Selection	The organization analyses the behavioural competencies & technical competencies of the employee during the selection Procedure.	0.146	.439	.014	.000 (.189)	.168
06	Competency-based Training & Development	The latest training methods are used to develop technical, behavioural and managerial competencies.	0.066	.738	.014	.000 (.295)	.006
07	Competency-based Performance Appraisal & succession Planning	Competency plays an essential component in performance Appraisal System, Promotion & Succession planning in your organization.	0.235	.262	.002 (.275)	.000 (.173)	.239
08	Competency-based Compensation	The compensation structure of your company is based on competency level.	0.202	.490	.303	.000 (.160)	.679
09	Competency-based HR policy	Competency-based HR policies and practices are followed in the organization.	0.621	.814	.187	.001 (.153)	.409
10	Competency-based Career development	Management encourages career development.	.000 (.196)	.760	.358	.002 (.151)	.000 (.187)
11	Talent Acquisition	Competency analyses are made starting right from inductions so that employees don't think of leaving the job.	0.029	.590	.111	.254	.040
		The gap between Talent in place and Talent required is identified by competency in the organization; along with this, priority is given at the time of interview to potential competent candidates when a vacancy arises.	0.075	.391	.439	.008	.065
		The linkage between competency and talent management results in Openness to change.	0.108	.376	.469	.006	.022
		Competency-based talent attraction leads to Hiring competent staff.	0.062	.364	.500	.000 (.210)	.007
12	Talent Development	Continuous Competency improvement practices are followed for developing and sustaining talented people in the organization.	0.414	.148	.003 (.269)	.002 (.151)	.106
		Encouraging creativity, innovation & Employee friendly policies lead to better talent development.	0.405	.474	.090	.001 (.155)	.000
		Employers regularly remind the importance of	0.361	.673	.216	.487	.835

		skills and competencies.					
		The critical skills of employees are upgraded regularly by employers.	0.917	.986	.710	.000 (.173)	.102
		Skill up-gradation and competency development are effective.	0.628	.817	.349	.000 (.193)	.278
		Upgraded skills match the market demand.	0.391	.169	.292	.001 (.159)	.405
13	Talent Retention	Individual or Group performance is recognized & rewarded with the help of competency analysis.	0.11	.773	.109	.326	.175
		Priority is always given to retaining all types of employees who have reasonable competency.	0.277	.239	.215	.056	.027
		Competency-based Talent management encourages freedom to work.	0.61	.779	.217	.395	.354
		The majority of the people remain for a longer time in the organization.	0.303	.166	.939	.017	.026
		Competency-based training & Flexibility helps the organization retain Talent in the organization.	0.452	.860	.018	.012	.001 (.153)
14	Competency-based Applications	The progress I made in my competence development gives me satisfaction	0.169	.698	.278	.000 (.210)	.041
		Competency-based training & Flexibility helps the organization retain Talent in the organization.					
		Continuous monitoring & feedback on the competencies are given to employees.	0.022	.461	.579	.000 (.170)	.000 (.166)

The study investigated the relationship between demographic variables and the awareness and implementation of competence-based human resource functions and talent management practices in a specific sample of employees. The findings revealed that age had a significant impact on learning competence, with older individuals experiencing difficulties in adapting to change and acquiring new skills. Younger individuals were more likely to change jobs for better opportunities, while older individuals prioritized stability and security in their careers. However, age did not significantly influence talent management practices, suggesting that skill and aptitude were more critical determinants of success.

Gender did not play a significant role in competencies and talent management practices, indicating a positive trend towards gender equality in organizational advancement (Dickens, 1998).

Designation did not significantly affect competence execution, implying that competencies could be developed at various levels within an organization. On the other hand, higher levels of education were associated with better proficiency in acquiring new human resource functions, highlighting the importance of education in competency development. Experience showed an inverse association with quality concerns, as more experienced individuals exhibited better control over their tasks. It also had significant associations with talent retention strategies and receiving monitoring and feedback.

These findings have several implications for organizations. Firstly, age diversity should be recognized and embraced, with targeted training and support provided to individuals of different age groups to bridge any learning and adaptability gaps. Talent development strategies should be tailored to accommodate the preferences and priorities of various age groups. Secondly, organizations should strive for gender equality in their talent management practices and provide equal opportunities for professional growth and development to all employees, regardless of gender.

Regarding designations, the study's findings suggest that competencies can be nurtured and developed at all levels within an organization, not just limited to specific job titles. This highlights the importance of providing training and development opportunities across all ranks and positions.

The significance of education in competency development indicates that organizations should invest in the continuous learning and upskilling of their employees. Encouraging employees to pursue higher levels of education can enhance their proficiency in acquiring new human resource functions and contribute to the overall success of the organization.

The study's findings on experience imply that organizations should acknowledge the varying needs and concerns of employees at different experience levels. Providing adequate support and feedback to less experienced employees can help them feel more secure and confident in their roles. Additionally, talent retention strategies should be tailored to retain experienced employees, acknowledging their value and contributions to the organization.

Overall, the study underscores the importance of understanding and addressing the impact of demographic variables on competencies and talent management practices within organizations. By implementing targeted strategies and promoting equality and continuous learning, organizations can foster a more skilled, adaptable, and engaged workforce, ultimately contributing to their long-term success and competitiveness in the global market.

6.9.3.1: Implications of the Findings:

The implications of the study's findings are manifold and have practical implications for organizations in the areas of talent management, employee development, diversity and inclusion, and HR practices. Here are the key implications:

Tailored Talent Development: Understanding the impact of age on learning and adaptability is crucial for designing effective talent development programs. Organizations should consider age-specific training and development initiatives to address the varying needs and preferences of employees at different stages of their careers. Younger employees may benefit from opportunities for skill acquisition and career advancement, while older employees might benefit from programs focused on enhancing their adaptability and change management skills.

Promoting Gender Equality: The study's finding that gender does not significantly influence competencies and talent management practices aligns with the importance of promoting gender equality in the workplace. Organizations should continue to foster an inclusive and diverse environment that provides equal opportunities for all employees, regardless of gender, to contribute their full potential and excel in their roles.

Competency Development at All Levels: The lack of significant association between designation and competence execution emphasizes that competencies can be developed at various levels within an organization. As a result, organizations should prioritize providing training and development opportunities to employees at all ranks and positions. This approach can lead to a more skilled and versatile workforce, benefiting the organization as a whole.

Investing in Education: The strong relationship between education and competency indicates that organizations should invest in employee education and continuous learning. Supporting employees in pursuing higher levels of education can lead to improved proficiency in acquiring new human resource functions, which can, in turn, contribute to organizational growth and success.

Recognizing Experience: Understanding the impact of experience on quality concerns, talent retention, and feedback reception can help organizations tailor their management practices accordingly. Recognizing and appreciating the value of experienced employees can foster loyalty and commitment, ultimately leading to a more stable and motivated workforce.

Strategic Talent Retention: The significant association between talent retention strategies and employee experience highlights the importance of strategic talent retention efforts. Organizations should focus on retaining experienced employees by offering growth opportunities, career progression, and a positive work environment that acknowledges their contributions.

Emphasizing Competency Awareness: The strong correlation between age, qualifications, experience, and competency awareness emphasizes the need for organizations to ensure that employees are well-aware of their competencies and skillsets. Effective communication and performance feedback can help employees understand their strengths and areas for improvement, leading to better utilization of their talents and increased job satisfaction.

In conclusion, the findings of this study provide valuable insights for organizations aiming to optimize their talent management practices, foster a diverse and inclusive workplace, and invest in the continuous development of their employees.

By recognizing and addressing the impact of demographic variables on competencies, HR functions, and talent management practices, organizations can build a more capable, adaptable, and engaged workforce, enhancing their overall performance and competitiveness in the modern business landscape.

6.9.4: Key Findings From Kruskal Wallis H Test & Post-Hoc Analysis (Designation wise)

Table Number: 6.11

Designation-wise Differences in the responses towards Total Competencies (managerial, Technical & behavioural Competencies), Competency-based HR, Talent Acquisition, talent Development & talent Retention of Employees from four key Sectors of the manufacturing industry of Gujarat

Selected Factors	Selected Level of Designation	Mean Score	Rank	The difference in Mean Value	Std. Error	Std. Test Statistic	Sig.	Adj. Sig
Total Competencies (managerial, Technical & behavioural Competencies)	Top Level	295.46-243.79		51.665	19.481	2.652	.008	.024**
	Lower level							
Competency-Based HR Functions	Top Level	301.60-230.10		71.505	15.015	4.762	.000	.000**
	Middle level							
Talent Acquisition	Top Level	286.66-246.88		40.041	14.970	2.675	.007	.022**
	Middle level							
Talent Management	Top Level	290.21-246.21		44.066	15.034	2.931	.003	.010**
	Middle level							
Talent retention	Top Level	294.80-242.32		52.483	14.943	3.512	.000	.001**
	Middle level							

Note: **Difference is significant at .05 level (2-Sided tests)
 The significance value has been adjusted by the Bonferroni correction for multiple tests

The study utilized the Kruskal-Wallis H test to investigate potential differences among multiple groups within the manufacturing industry in Gujarat, focusing on Total Competencies, Competency-based HR functions, and various aspects of Talent Management. The results revealed significant variations among the groups, with upper-level management demonstrating a distinct advantage in comprehending and implementing diverse competencies compared to middle and lower-level employees. The disparity in mean ranking was particularly pronounced when comparing Top Level and Lower Level management, highlighting the marked divergence between these hierarchical strata. The study also found that senior management showed higher levels of engagement in all competencies, while lower-level management tended to emphasize technical competencies more.

6.9.4.1: Implications of the Findings:

Competency Development: The study's findings suggest that upper-level management exhibits higher levels of engagement in all competencies, which implies that organizations should prioritize competency development programs for employees across all levels, but with particular attention to middle and lower-level managers. By providing targeted training and development opportunities, organizations can bridge the competency gap and improve overall performance.

Talent Acquisition: The study highlights the influence of senior management in talent acquisition, emphasizing the need for strategic policies and programs to attract individuals with exceptional abilities. Organizations should focus on aligning talent acquisition practices with the specific requirements of each management level, ensuring that the hiring process is tailored to the needs of the organization and the expectations of different managerial roles.

Talent Development: Given the observed emphasis on technical competencies among lower-level managers, organizations should invest in talent development initiatives that focus on nurturing broader managerial and behavioral competencies. Training programs and career advancement opportunities should be designed to help employees progress through the organizational hierarchy, preparing them for higher-level responsibilities.

Talent Retention: The study underscores the importance of retention policies that are tailored to the hierarchical position of employees. Organizations should recognize that different levels of management have varied preferences and motivations, with cash-based incentives being more significant for lower-level managers and non-monetary benefits, such as vacation time, holding greater value for higher-level managers. Implementing retention strategies that consider these differences can contribute to higher employee satisfaction and reduced turnover rates.

Senior Management Involvement: The study's post hoc analysis revealed the crucial role of senior management in determining and driving HR policies and practices, especially in talent development and retention. Organizations should foster a culture of strong leadership involvement and collaboration between senior management and other levels to ensure effective implementation of HR strategies and achieve organizational goals.

In conclusion, the study provides valuable insights into the disparities in competencies and HR practices across different levels of management in the manufacturing industry in Gujarat. By understanding these findings and their implications, organizations can design targeted interventions to improve competency development, talent acquisition, talent development, and talent retention strategies, ultimately enhancing overall organizational performance and success.

6.9.5 :Key Findings From Krushkal Wallis H Test & Post-Hoc Analysis (Industry-wise)

Table Number:6.12 Industry-wise Differences in the responses for Talent Acquisition & Talent Retention of Employees from four key Sectors of the manufacturing industry of Gujarat

Selected Factors	Selected Level of Designation	Mean Score	Rank	The difference in Mean Value	Std. Error	Std. Test Statistic	Sig.	Adj. Sig
Talent Acquisition	Oil & Gas Industry - Chemical & Petrochemical industry	296.82	241.27	55.548	20.734	2.679	.007	.044**
Talent Retention	Oil & Gas Industry - Chemical & Petrochemical industry	308.14	250.66	57.476	20.696	2.777	.005	.033**
	Oil & Gas Industry - Pharmaceuticals & biotechnology Industry	308.14	257.45	50.688	18.342	2.763	.006	.034**

Note: **Difference is significant at .05 level (2-Sided tests)

This significance value has been adjusted by the Bonferroni correction for multiple tests

The study utilized the Kruskal-Wallis H test to investigate potential differences among multiple groups within the manufacturing industry in Gujarat, focusing on Total Competencies, Competency-based HR functions, and various aspects of Talent Management. The results revealed significant variations among the groups, with upper-level management demonstrating a distinct advantage in comprehending and implementing diverse competencies compared to middle and lower-level employees. The disparity in mean ranking was particularly pronounced when comparing Top Level and Lower Level management, highlighting the marked divergence between these hierarchical strata. The study also found that senior management showed higher levels of engagement in all competencies, while lower-level management tended to emphasize technical competencies more.

6.9.5.1: Implications of the Findings:

Talent Management Practices Differ Across Industries: The Kruskal-Wallis test results suggest that there are significant differences in Talent Management practices among the four major sectors of the manufacturing industry in Gujarat. This indicates that each industry might have unique approaches and strategies for managing talent, reflecting the specific challenges and demands faced by companies in these sectors.

Oil & Gas Industry Excels in Talent Acquisition and Retention: The post hoc analysis reveals that the oil and gas industry has a superior standing in both Talent Acquisition and Talent Retention practices compared to the other industries. This finding suggests that the oil and gas sector may have well-developed recruitment and retention strategies, which could contribute to attracting and retaining high-quality talent in the industry.

Agro& Food Processing Industry Performs Well in Talent Acquisition: Similar to the oil and gas industry, the agro and food processing industry also exhibit strong Talent Acquisition practices. This implies that companies in this sector have effective talent sourcing and recruitment processes in place, enabling them to attract skilled individuals to their organizations.

Pharmaceutical & Biotechnology and Chemical & Petrochemical Industries Need Improvement: The post hoc analysis indicates that the pharmaceutical & biotechnology industry and the chemical & petrochemical industry have room for improvement in their Talent Acquisition, Talent Development, and Talent Retention practices. These sectors might face challenges in talent management and could benefit from revisiting their strategies to align them better with industry best practices.

Contrasting Perspectives in Talent Management between Oil & Gas and Other Industries: The study's outcomes revealed stark differences between the oil and gas industry and the pharmaceutical & biotechnology industry and the chemical & petrochemical industry concerning Talent Acquisition, Talent Development, and Talent Retention practices. This contrast underscores the need for benchmarking and knowledge sharing between industries to improve talent management practices across the board.

Scope for Industry-Wide Talent Management Enhancement: The overall findings highlight the significance of enhancing talent management practices across all industries within the manufacturing sector of Gujarat. Companies can benefit from sharing best practices, fostering a culture of talent development, and prioritizing employee retention to maintain a skilled and engaged workforce.

In conclusion, the analysis of Talent Management practices among different sectors of the manufacturing industry in Gujarat reveals variations in viewpoints and practices. The oil and gas industry and the agro and food processing industry demonstrate stronger talent management practices compared to the pharmaceutical & biotechnology industry and the chemical & petrochemical industry. By identifying areas of improvement and adopting industry-specific best practices, organizations can strengthen their talent management efforts and positively impact their overall performance and competitiveness.

6.9.6 : Key Findings From Structure Equation Modeling- Pls Sem- Path Analysis Result

The fact that all studies included in the analysis provided absolute values and significance levels for the path relationships of constructs, except for the association between Competency & Talent Management, highlights the potential for conducting further mediation analysis to understand this relationship better.

Table Number: 6.13
Findings of Regression and Hypotheses Testing

Hypotheses	Testing of Hypotheses	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STD EV)	P values	Decision
H1	Competencies > Competency_Based_HR	0.428	0.429	0.044	9.655	0.000**	Support
H2	COMP_Application > Competency_Based_HR	0.438	0.437	0.043	10.145	0.000**	Support
H3	Competencies > TM_Total	0.004	0.004	0.013	0.33	0.371	Reject
H4	Competency_Based_HR > TA	0.606	0.606	0.033	18.4	0.000**	Support
H5	Competency_Based_HR > TD	0.552	0.553	0.033	16.898	0.000**	Support
H6	Competency_Based_HR > TR	0.722	0.723	0.024	29.828	0.000**	Support
H7	TA > TM_Total	0.353	0.352	0.014	24.903	0.000**	Support
H8	TD > TM_Total	0.592	0.593	0.016	37.467	0.000**	Support
H9	TR > TM_Total	0.231	0.231	0.015	15.586	0.000**	Support

Note: Comp_HR = Competency based HR Functions, TA = Talent Acquisition, TD = Talent Development, TR = Talent retention

6.9.6.1: Implications of the Findings:

The findings of this analysis have several important implications for talent management practices within the organization. One of the key takeaways from the results is the significant relationship observed between Competency and Competency-based HR Functions with Talent Acquisition, Talent Development, and Talent Retention. These factors are fundamental elements of effective talent management practices. The rejection of null hypotheses for all other constructs, except for Competencies & Talent Management, indicates that there are no significant relationships between most of the constructs under examination. However, the path coefficient analysis shows a strong and significant relationship between competency and competency-based human resources functions, as well as between Competency-based HR Functions and talent management approaches. This significant and robust relationship opens up new possibilities for implementing accurate and effective talent management protocols and policies across the entire organization. By understanding and leveraging the links between competency, HR functions, and talent management, organizations can optimize their talent acquisition, development, and retention strategies.

This could lead to more targeted recruitment efforts, tailored training programs, and improved retention initiatives, ultimately enhancing the overall talent pool and workforce performance.

Furthermore, the potential for conducting mediation analysis between Competency & Talent Management suggests that further investigation is required to unveil the underlying mechanisms that explain this relationship. Identifying the mediating factors can provide critical insights into how organizations can leverage competencies to drive talent management success. This research could also inform the development of targeted interventions and strategies to bridge the gap and strengthen the association between competency and talent management.

Overall, these findings underscore the importance of understanding and prioritizing competency-based HR functions in talent management efforts. Organizations that focus on developing and harnessing competencies while aligning them with their talent management approaches are likely to gain a competitive advantage in attracting, developing, and retaining top talent. Implementing evidence-based talent management protocols, informed by the results of this analysis, could lead to more efficient and productive talent management practices, contributing to the overall success and growth of the organization.

6.9.7: KEY FINDINGS FROM STRUCTURE EQUATION MODELING- Q²PREDICT RESULT:

Table Number: 6.13 Findings of Q²predict	
Selected Constructs	Q²predict
COMP_HR4	0.249
COMP_HR5	0.139
COMP_HR6	0.216
COMP_HR7	0.391
COM_HR1	0.455
COM_HR2	0.422
COM_HR3	0.384
TALENT_Acquisition_1	0.173
TA_Acquisition_2	0.18
TA_Acquisition_3	0.156
TA_Total	0.226
TALENT_DEVELOPEMENT_3	0.042
TALENT_DEVELOPEMENT_4	0.082
TALENT_DEVELOPEMENT_5	0.127
TALENT_DEVELOPEMENT_6	0.15
TALENT_DEVELOPMENT_1	0.199
TD_Total	0.263
TALENT_RETENTION_1	0.146
Talent_Retention_2	0.179
TR_Total	0.215
Note: Comp_HR=Competency based HR Functions, TA=Talent Acquisition, TD=Talent Development, TR=Talent retention	

The findings of the study suggest that the Partial Least Squares (PLS) path model, when evaluated using the Q² metric, demonstrates higher predictive accuracy compared to traditional R² measures. Shmueli et al. (2016) proposed a set of methodologies aimed at making predictions beyond the confines of the available data sample. This process entails the construction of a model using an analysis sample and evaluating its predictive capabilities using a distinct set of data referred to as a holdout sample. The researchers applied the PLS predict methodology within the Partial Least Squares Structural Equation Modelling (PLS-SEM) framework to assess the model's predictive capabilities using a holdout sample, which was distinct from the analysis sample used for constructing the model.

The Q² values obtained for the endogenous constructs were found to be greater than zero, indicating that the model exhibits a robust predictive capacity. The Q² values of 0, 0.25, and 0.5, corresponding to low, moderate, and high levels of predictive significance, were all exceeded, implying that the model's predictive power is at least moderate or higher for the constructs under consideration (Hair & Sarstedt, 2019).

6.9.7.1: Implications of the Findings:

The research findings have significant implications for the field of Competency-based Talent Management across diverse industries. By establishing a predictive model with high accuracy, organizations can effectively estimate various talent management aspects, such as identifying and nurturing talents, improving workforce competencies, and aligning employee skills with organizational goals.

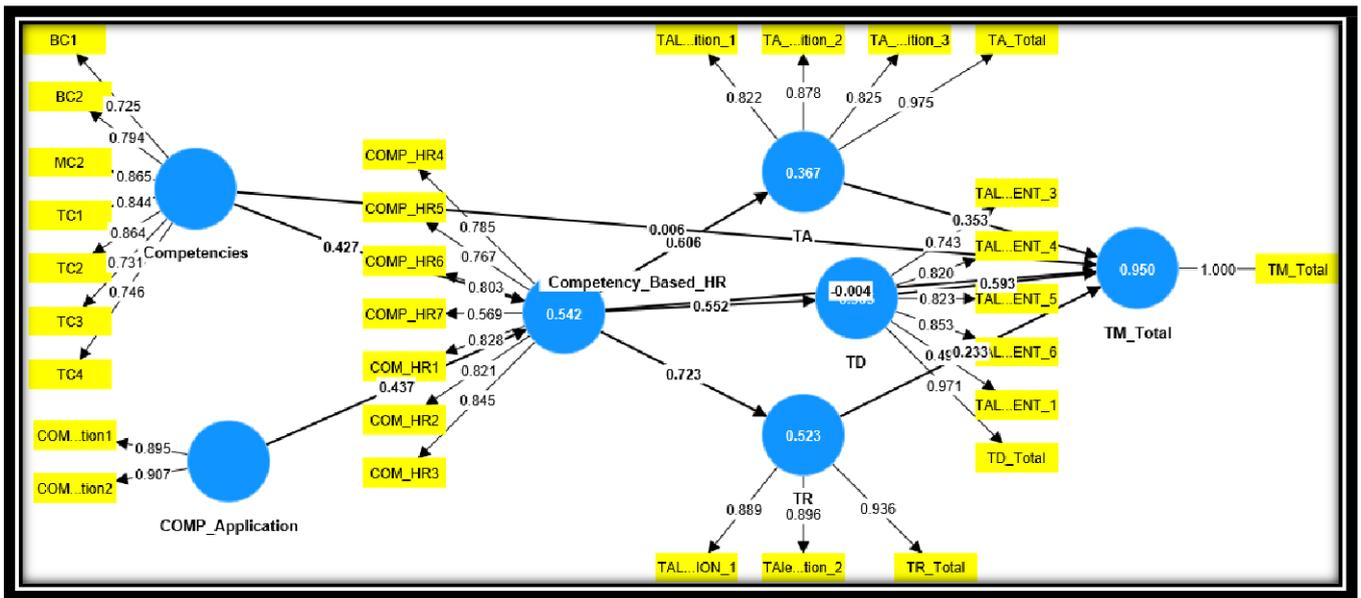
The use of the PLS path model with the Q² metric as an alternative to R² allows researchers and practitioners to focus on the model's predictive capacity rather than just its explanatory power within the sample used for training. This approach offers a more comprehensive assessment of the model's performance and enhances its applicability in real-world scenarios.

With the demonstrated predictive validity of the PLS path model, decision-makers can confidently rely on the model's predictions to make data-driven talent management decisions in future samples. This can lead to more effective talent acquisition, retention, and development strategies, resulting in improved organizational performance and competitiveness.

Overall, the research contributes to the advancement of the Competency-based Talent Management field and provides a valuable methodological framework for evaluating predictive models using holdout samples and the Q² metric. Organizations can now leverage this approach to enhance their talent management practices and improve their overall human resource management strategies. However, it's important to note that while the model has demonstrated predictive significance, ongoing validation and refinement should be conducted as new data becomes available to ensure its continued accuracy and relevance.

GraphNumber:6.3

ResultsofStructuralModelAssessment



Based on the empirical findings of the measurement model, a statistically significant association is observed between the concept under investigation and its predecessor across all dimensions. It is recommended to strive for loadings exceeding 0.70, as these indicate that the construct demonstrates satisfactory item reliability by accounting for over 50 percent of the variance in the indicator. The key construct was effectively described by considering only Communication Skills and a limited number of talent management strategies that had lower values and were excluded from the study. The study's implications suggest that effective communication skills are crucial in developing human resources within an organisation. However, it is worth noting that these skills may not have a significant influence in the context of competency-based HR and talent management. Based on the analysis of reflecting indicator loadings, commonly called outside loadings, it is evident that a limited number of practices, precisely one from talent acquisition, one from talent development, and two from talent retention, did not significantly influence talent management practices. The outcome of the measuring model also imposes constraints on the reliability and validity of the construct.

This observation ultimately implies a notable consistency and reliability in referring to both the exogenous and endogenous constructs. Higher values generally indicate higher levels of reliability. The study's findings revealed that all constructs exhibited values above and below the threshold of 0.95, indicating their reliability. The examination of the convergent validity of each construct is addressed during the third stage of the assessment of the reflective measurement model. Convergent validity refers to the extent to which a construct effectively accounts for the variability observed among its constituent elements.

The AVE value of this study, surpassing the threshold of 0.50, signifies the presence of convergent validity and implies that the observed variability in statements can potentially be accounted for, thereby illustrating the consistency of indicators and the robust correlation between assessments of constructs and other measures designed to assess theoretically linked concepts. Based on the study's results, it is observed that the discriminant validity values of the selected constructs are below the threshold of 0.85.

This result illustrates that the selected constructions possess distinct characteristics that differentiate them. This observation suggests that each construct has a unique conceptual framework that sets it apart from the other. The Measurement model results provided evidence for the construct's validity and reliability. The evaluation of the structural model is essential for assessing the predictive component of the model. Based on the examination conducted, the researcher has determined that common method bias is absent, thus indicating the absence of any collinearity concerns with the data, which implies that each participant thoroughly examined the questions and provided suitable responses. Consequently, no two participants offered identical answers to all the questions.

The metric used to assess the predictive accuracy within the sample is commonly known as the coefficient of determination, denoted as R². All R² values exceed 0.25, indicating that all constructs in the study possess a heightened explanatory capability. Values greater than 0.50 indicate that competency-based human resources (HR) and talent retention possess exceptional and advantageous predictive capacities. The disparity in R² values between the model incorporating the preceding construct and the model can be utilised to ascertain the magnitude of the f² effect.

Based on established categorisations, effect sizes of 0.02, 0.15, and 0.35 are conventionally classified as small, medium, and large, respectively. The findings suggest that the variables exhibit a substantial effect size, as evidenced by a magnitude exceeding 0.35. The Q² prediction analysis is a significant method that utilises PLS prediction. The findings from the Q² prediction in this study indicate a substantial level of predictive capability in the model. Similar results can probably be achieved if this model is applied to different samples or industries. The results of the study indicate that R² (in-sample explain power), F² (effect size), and Q² predict (in-sample & out-sample explain power) all demonstrate a higher and more robust value. This suggests that the conceptual model possesses substantial predictive capability, which can be instrumental in facilitating success for businesses and other research endeavours in the domain of talent management.

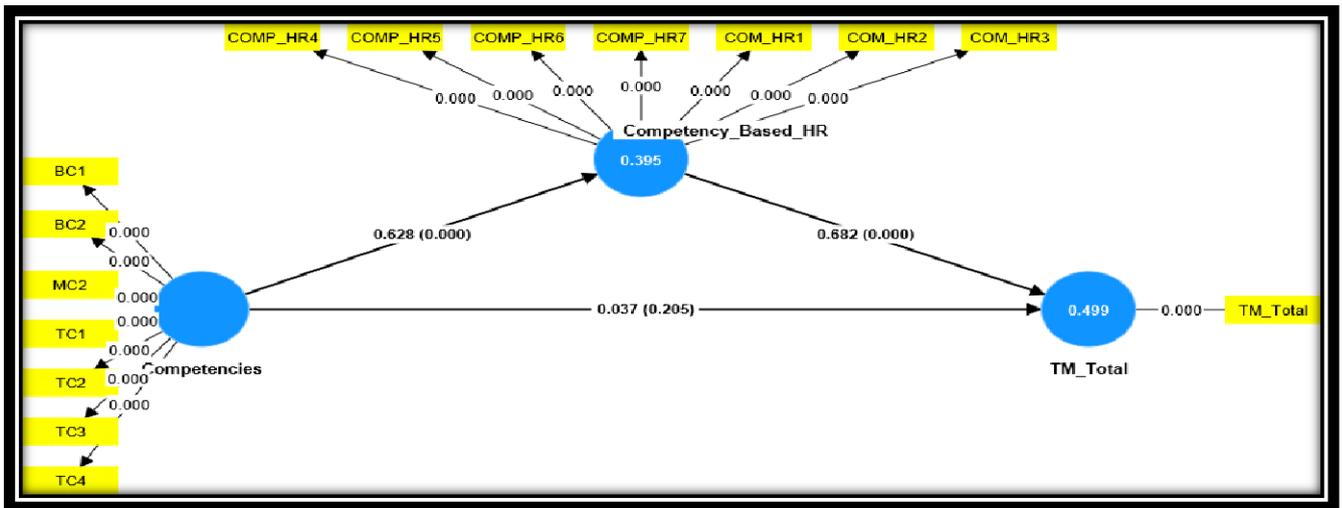
**.TableNumber:6.15
Mediation Analysis-Total Direct Effect result of Competency, Competency-based HR functions & Talent Management**

Total direct Effects	Original sample(O)	Sample mean(M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Competencies -> Competency_Based_HR	0.628	0.63	0.033	19.078	0.000**
Competencies->TM_Total	0.037	0.037	0.045	0.824	0.205
Competency_Based_HR -> TM_Total	0.682	0.683	0.039	17.289	0.000**

Table Number: 6.16
SpecificIndirectEffects

SpecificIndirectEffects	Original sample(O)	Sample mean(M)	Standard deviation (STDEV)	T statistics (O/STDEV)	Pvalues
Competencies	-	-	-	-	-
>Competency_Based_HR	-	-	-	-	-
>TM_Total	0.429	0.43	0.031	14.042	0.000**

Graph Number: 6.4
Result of Mediation Analysis



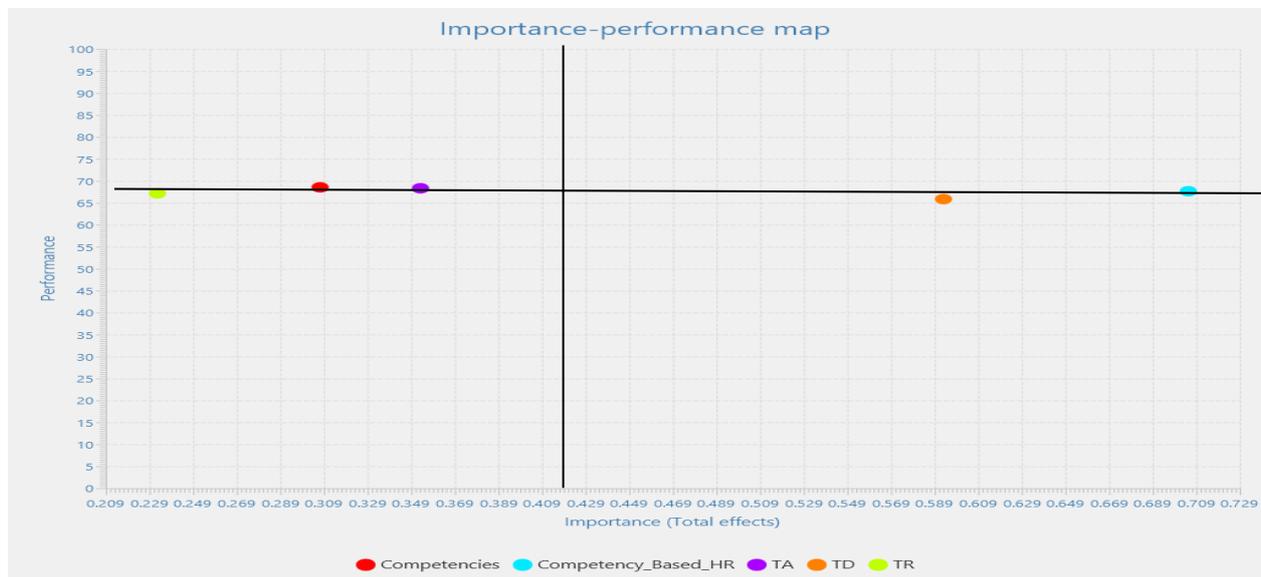
The concept of "Mediation" was introduced by Baron and Kenny in the year 1986. The authors proposed that the most persuasive evidence favouring mediation is evident when a direct effect is absent. Only an indirect effect, which is commonly referred to as "full mediation" (David A. Kenny and Reuben M. Baron, 1986), The occurrence of simultaneous indirect and direct effects is frequently denoted as "partial mediation" in academic discourse. Although complete mediation is widely regarded as the optimal criterion, it has been observed that a considerable proportion of scholarly articles conclude with this notion only when all tests are executed and reported suitably (Zhao et al., 2010). The study's results indicate that although Competencies have no significant direct impact on Talent Management, there is evidence of complete mediation through competency-based HR functions and underscores the significance of prioritising competency-based human resources functions for organisations that aim to implement Talent Management practices.

TableNumber:6.17
FindingsofImportancePerformanceMAPAnalysis(IPMA)

Selectedconstructs	Importance	Performance
COMP_Application	0.308	69.744
Competencies	0.307	68.534
Competency_Based_HR	0.705	67.647
TA	0.353	68.322
TD	0.593	65.861
TR	0.233	67.16
Average	0.4165	67.878

Note:Comp_HR=CompetencybasedHRFunctionsTA=TalentAcquisition,TD=Talent Development,TR=Talentretention

GraphNumber:6.5
Importance Performance Map



The evaluation of the comprehensive impacts of the structural model on a designated target construct is conducted by the IPMA through a comparison with the mean latent variables scores of the predecessors of this construct. According to (Hair & Sarstedt, 2019), Based on the research conducted by the Importance Performance Map analysis (IPMA), the successful adoption of Talent Management practices is closely tied to the effective utilisation of Competency-based Human Resources (HR) functions. Nevertheless, the performance in this particular domain is merely average and necessitates enhancement through the execution of diverse policies and programmes. Furthermore, the research underscores the significance of talent development within the framework of talent management practises, noting that its current performance falls short of the average standard. This ultimately underscores a lack in the execution of suitable talent development strategies within the organisation. Based on the findings of the survey, it can be observed that certain constructs exhibit a relatively lower level of significance in the context of talent management within an organisation.

The penultimate assessment for the structural model is the Importance Performance Map, which examines the significance of constructs and their actual performance in the industry through the utilisation of gathered data. The study's findings indicate that competency-based human resources functions greatly influence the implementation of talent management techniques. The performance in this particular domain is of moderate quality, necessitating the implementation of various policies and initiatives to enhance it. The study additionally demonstrates that although talent development is a crucial element of talent management strategies, its performance is below par. This revelation ultimately reveals a deficiency in the organisation's implementation of effective talent development strategies. The survey results suggest that other factors have a lower level of significance in the development of talent management within an organisation.

6.10 : OBJECTIVES OF THE RESEARCH STUDY & IT'S RESULTS:

6.10.1: Primary Objective of the research study:

The key objective of this research study is to examine the Competency-Based HR Functions leading towards Talent Management amongst selected employees of four key sectors of the manufacturing industry of Gujarat State viz. Agro & Food Processing, Oil & Gas, Pharmaceuticals & Biotechnology, and Chemical & Petrochemical industries.

Result of Primary Objective

The study's findings on structural equation modelling unequivocally underscored the significance of establishing a robust association between competency-based human resource functions and talent management practices. Both the assessment model and measurement model meet the necessary criteria for demonstrating strong associations through convergent validity, discriminant validity, reliability, R² (in-sample explanatory power), F² (effect size), and Q² predict (in-sample and out-sample explanatory power). All determinants exhibit elevated and robust values, signifying that the conceptual model possesses a robust association and notable predictive capability. This can facilitate success in talent management for businesses and other scholarly endeavours. The study also highlighted no significant direct relationship between competency and talent management practices. This implies that a Competency-based HR function is essential to establish a robust Competency-based Talent management system within the organisation. In conclusion, the research study's primary objective was successfully achieved by providing compelling evidence of the association between competency-based HR functions and talent management practices. The results offer practical and strategic insights for organizations in the manufacturing sectors of Gujarat State and beyond. By emphasizing the importance of competency-based HR functions and their mediating role, the study's findings contribute to advancing talent management practices and fostering success within organizations.

6.10.2: Secondary Objectives of the research study:

6.10.2.1: Objective 01: To examine the individual employees' awareness of the Competency and its applications in the selected companies of the Gujarat State manufacturing industry.

Result of Objective 01: The researcher has supplied information on awareness and Identification of Competence in this area. Competence is one of the well-defined notions in literature. Still, it is fraught with ambiguity in the real world, particularly its precise meaning and how it contributes to individual and organisational growth. In the study, Competency is a key area that leads to Talent Management Practices; the researcher asked a direct question about awareness of Competency and got two types of results; Majority of respondents, around 79 percent, are aware of the competencies; some respondents know the use and applications of Competency, but they don't know what exactly mean by Competency; these type of respondents have put into another category, i.e. about 21 percent of respondents are not aware of what Competency is.

Concluding Remarks for Objective:01

The results revealed that almost three-quarters of respondents are aware of and interested in learning more about competences, while the remaining one-quarter are not. Further analysis revealed that respondents who marked "unaware" were also able to answer questions about specific competencies like "Communication Skills," "Learning," and "Interpersonal Skills," among others; this suggests that respondents who marked "unaware" are familiar with the concept of "Competency," but are simply unfamiliar with its terminology.

6.10.2.2: Objective 02: Identify different competencies that help the organisation establish Talent Management.

Result of Objective 02: The researcher used qualitative analysis to find results for this objective after reviewing massive literature regarding competency & competency-based Management. Researchers could find three major areas needed to develop competency-based HR functions, ultimately leading to Talent management in the organizations. The researcher developed the three groups after reviewing robust literature, which is given below: Managerial competence is the ability of a leader or manager to direct what needs to be done to achieve the organisation's objective and communicate the expected outcome of those efforts. (Manxhari et al., 2017) Behavioural competencies are the collective knowledge, attitude and action an individual possesses in a business setting across all job levels. (Mercer, 2016) A behavioural competency framework is an inventory of anticipated skills, knowledge and behaviours that lead to excellence on the job. It describes competencies in behavioural terms, using indicators to help recognise the competencies when individually demonstrated. (Resouce, 2016). Technical Competencies: Specific competencies are usually required to perform a given job within a job family. (OECD, 2004) The technical/professional competencies tend to be specific to roles or jobs within the Job Family and include the specific skills and knowledge (know-how) to perform effectively (e.g. ability to use particular software; knowledge in particular professional areas such as finance, biochemistry, etc.). These competencies could be generic to a Job Family or specific to roles, levels or jobs within the family. (Resouce, 2016).

To identify various competencies in this significant group researcher reviewed various research papers, articles, books and the unpublished or published work of prestigious authors who have worked for a long time in this field. The researcher focused more on two works– the first one is the work of Professor Dave Bartram, who had given SHL universal Competency framework- SHL’s “Great Eight” Competencies (Bartram, 2012), and the former one is David D. Dubois & William Rothwell’s book on competency tool kit-I.

Concluding Remarks for Objective 02: The researcher initiated the study by identifying various competencies, and reviewing hundreds of research papers, articles & book chapters. This results in the development of an exhaustive list of competencies; after reviewing their relationship with HR functions & talent management, the researcher could develop an accurate list of competencies which further helps the organisation in developing competency-based HR & talent management in the Organisation.

The result of the study strongly indicates that when these competencies are merged with HR functions in the organisation, it will lead to grand success for talent management practices. Competency management places competencies at the heart of Talent Management. Consistently defining competencies helps to bind and integrate the organization’s Talent Management processes because the competencies act as a common denominator.

6.10.2.3: Objective 03: To identify the different Human Resource Functions where the competency-based tools are used in the selected companies of the Gujarat State manufacturing industry.

Result of Objective 03: The researcher did a systematic literature review to identify various Competency-based HR functions. The researcher used Scopus & Web of Science databases with the keywords “Competency” & “Human Resource Management”. Initially, the researcher could find 2943 documents from Scopus, then the researcher had a limit to research papers & articles after the year 2010, which gave the result of 200 plus papers; after studying the abstract of all papers researcher finalized the eight functions, which are highly recommended for further analysis such as Competency-based Recruitment, Competency-based Selection, Competency-based Training & Development, Competency-based Performance Appraisal & succession Planning, Competency-based Compensation, Competency-based HR policy, Competency-based Career development.

Concluding remarks for Objective 03: The result showcases the benefits and connection of these functions to talent management practices via Executing business strategy by developing competency-based HR functions which help organisations in staying competitive by developing and retaining a well-skilled workforce, Reducing costs by identifying real training needs, Reducing unnecessary contractor costs by identifying existing internal competencies, Maximize workforce ROI by developing and utilizing employee competencies effectively. Improve recruitment processes by providing precise requirements, Mitigate operational risks by identifying competency gaps, and Retain employees by identifying employee development opportunities. The result of the study purely indicates that if any organisation wants to apply Talent Management practices in the organisation, they all have to apply all these functions mandatorily.

6.10.2.4: Objective: 04: To study the relationship between Competencies and Talent Management in the selected companies of the Gujarat State manufacturing industry.

Result of Objective: 04: To study the between Competencies and Talent Management the Researcher had applied Correlation Test & Path analysis which is based on regression & also applied the Outer loading Matrix for eliminating less expressive item for identify major Competencies which ultimately necessary for developing talent management in the Organisation.

Table Number: 6.18	
Findings of Reflective indicator loadings - Outer Loading Matrix of selected employees from four key sectors of the manufacturing industry in Gujarat.	
Selected Statements	Competencies
Communication Skill	0.024

Table Number: 6.19		
Findings of Correlation Between Communication Competency set, Overall Competency & talent Management practices		
Sr. No	Selected Factors	Talent Management
01	Communication competency set	-0.060*
02	Overall Competencies	0.305**

Table Number: 6.20							
Findings of Regression and Hypotheses Testing							
Hypotheses	Testing of Hypotheses	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
H3	Competencies - >TM_Total	0.004	0.004	0.013	0.33	0.371	Reject

At the initial analysis stage, the overall competency sets & talent management results had a positive & significant correlation, demonstrating a strong association between competency & talent management practices in the organisation. But while doing further analysis through regression Path analysis, a researcher could find no significant relationship between competency & talent management. The primary reason can be a communication Competency set, which is adversely correlated with Talent Management practices.

The result of regression and hypothesis testing clearly shows there is no direct relationship between Competency & Talent Management as the researcher failed to reject the null hypothesis, which “Greater competencies implemented in the organisation will not strengthen the Talent Management practices”, but the result also showcases an indirect solid effect between Competency & talent management as Competency has a positive and significant relationship between Competency-based HR functions.

Concluding Remarks for Objective: 04: The result showcases that at the initial stage, overall competency has a positive & significant relationship with talent management which demonstrates that competency plays a crucial role in developing Competency-based HR practices & talent Management practices, but communication competency set has a negative and significant relationship which makes a major difference in the path analysis too.

When conducting Outer Loading Relevance Testing, it is recommended to remove reflective indicators with item loadings below 0.40 as they do not effectively explain the latent construct, and the communication competency set has 0.024 item loadings, forcing the researcher to remove the construct. The overall study result of Correlation & path analysis revealed there is no significant association between competency & talent Management practices directly. The study’s results conclude that although competency does not have a direct impact on talent management, it has a strong impact on competency-based HR functions & talent management functions, which demonstrates the core importance of competencies in developing competency- based HR in the organisation. The result also opens the door for the mediation of Competency-based HR in the organisation.

6.10.2.5: Objective: 05: To study the relationship between Competencies based HR Functions and Talent Management Functions in the selected companies of the Gujarat State manufacturing industry.

Result of Objective: 05: The study’s result revealed a strong association between Competency-based HR functions & talent management practices through correlation & regression & path analysis results of PLS-SEM. Even the direct effects through bootstrapping analysis also showcase the significant relationship between Competency-based HR functions & talent management practices.

Table Number: 6.21		
Findings of Correlation Between Overall Competency-Based HR Functions & talent management of Selected Employees from four key sectors of the manufacturing industry of Gujarat State		
Sr. no	Selected Factors	Talent Management
01	Overall Competency-based HR Functions	0.511**

Table Number: 6.22: Total Direct Effect Result of Competency-based HR Functions & Talent Management					
Total direct Effects	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Competency_Based_HR >TM_Total	0.682	0.683	0.039	17.289	0.000**

Table Number: 6.23 Findings of Regression and Hypotheses Testing							
Hypot heses	Testing of Hypotheses	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
H4	Competency_Based_HR > TA	0.606	0.606	0.033	18.400	0.000**	Support
H5	Competency_Based_HR > TD	0.552	0.553	0.033	16.898	0.000**	Support
H6	Competency_Based_HR > TR	0.722	0.723	0.024	29.828	0.000**	Support

Note: Comp_HR= Competency based HR Functions TA= Talent Acquisition, TD= Talent Development, TR=Talent retention

Concluding remarks for Objective: 05: The result induced a strong & significant relationship between competency-based HR functions & talent management practices. The study also indicates the full mediation role of competency- based HR functions between Competency & Talent Management practices, which concludes that if any organisation wants to establish proper and successful talent management practices, they must rely on competency-based HR functions.

6.10.2.6: Objective:06: To analyse the Importance & Performance of Competencies, Competency-based HR functions, Talent Acquisition, Talent Development, and Talent retention in the selected sectors of the Gujarat State manufacturing industry.

Result of Objective: 06:To analyse which Construct is most important in the organisation to apply Talent Management Practices the researcher had applied IPM Analysis on Smart PLS-4.

Table Number: 6.24		
Findings of Importance Performance MAP Analysis (IPMA)		
Selected constructs	Importance	Performance
COMP_Application	0.308	69.744
Competencies	0.307	68.534
Competency_Based_HR	0.705	67.647
TA	0.353	68.322
TD	0.593	65.861
TR	0.233	67.16
Average	0.4165	67.878
Note: Comp_HR= Competency based HR Functions TA= Talent Acquisition, TD= Talent Development, TR= Talent retention		

The Importance Performance Map, which analyses the importance of constructs and actual performance in the industry using data gathered, is the last but one of the crucial assessments for the structural model. The study's findings suggest that competency-based HR functions play a significant role in adopting talent management techniques. The performance in this area is just average, though, and has to be improved by adopting numerous policies and initiatives. The study also shows that while talent development is essential to talent management strategies, its performance is currently subpar. This finally exposes a weakness in the organisation's application of suitable talent development techniques. The survey's findings indicate that other constructs are essential in the growth of talent management. Still, it can focus later after the proper application of talent development practices inside an organisation.

Concluding remarks for Objective: 06: The result indicates that the factors which have the highest importance in establishing talent management practices in the organisation are relatively average in performance. Competency-based HR has a value of 67.647 which is near to average, i.e., 67.878. In contrast, talent Development has an importance of 0.705. Still, its performance is below the average, which concludes that the four key industry managers & policymakers should concentrate more on developing talent development practices in the organisation.

After that, they should also focus on developing competency-based HR functions in the organisation as they both have valued the importance of developing talent management practices.

Other factors have a role in developing talent management, but it does not consist of that much importance, which is valued by talent development & Competency-based HR functions. Ultimately this analysis guides the policymakers to develop or concentrate on the core part first and then other factors. The core part of this analysis is talent development & Competency-based HR functions.

6.11: Hypothesis Testing & its Result:

6.11.1: Hypothesis:01

"Greater the Awareness of Competencies, will Strengthen the Competency-Based HR Functions"

Result of Hypothesis: 01: The researcher applied a Correlation test to evaluate the association between Competency & Competency based HR functions. The result of the study is demonstrated in the below table.

Table Number: 6.25			
Findings of hypothesis testing through correlation analysis of Competency-based HR Functions & various Competency Sets of Selected Employees of four key sectors of the manufacturing industry of Gujarat State			
Alternative Hypothesis no.	Alternative Hypothesis	Values for Competency-based HR Functions	Decision
01	"Greater the Awareness of Communication Competency Set will Strengthen the Competency-Based HR Functions."	-0.050	Not Approved – failed to reject the null hypothesis
02	"Greater the Awareness of Organisation Awareness & information seeking competency Set will strengthen the competency-based HR functions."	0.258**	Approved
03	"Greater the Awareness of Interpersonal Skill & Relation building competency Set will strengthen the competency-based HR functions."	0.338**	Approved
04	"Greater the Awareness of Empathy, Influence & Persuasive competency Set will strengthen the competency-based HR functions."	0.405**	Approved
05	"Greater the Awareness of Flexibility competency Set will strengthen the competency-based HR functions."	0.363**	Approved
06	"Greater the Awareness of Learning competency Set will strengthen the competency-based HR functions."	0.346**	Approved
07	"Greater the Awareness of Create your own Measure of Excellence & Quality Concern competency Set will strengthen the competency-based HR functions."	0.514**	Approved
08	"Greater the Awareness of Initiative competency Set will strengthen the competency-based HR functions."	0.515**	Approved
09	"Greater the Awareness of Competencies will Strengthen the Competency-Based HR Functions."	0.462**	Approved

Note: **. Correlation is significant at the 0.01 level (1-tailed).

Concluding remarks for the Test of Hypothesis 01:

The overall competencies, except the communication competency set, were approved for the positive & significant relationship between competency & competency-based HR functions. These competency sets are the core competencies which every organisation has to achieve to survive and prosper in the business 5.0 Era. These competencies will assist people and organisations in embracing change and evolving in the ever-changing business world. The research findings demonstrated that increased awareness and competencies would result in more robust competency-based HR functions (competency management) inside the organisation.

6.11.2: Hypothesis:02

Greater competencies implemented in the organisation will strengthen talent acquisition, talent development, talent retention & Talent Management practices.

Result of Hypothesis:02: To evaluate the association between competencies & Talent management practices Resercher had applied the CorellationTest.The result of test listed below in Table no:6.26.

Table Number: 6.26 Findings of hypothesis testing through Correlation Between Talent Acquisition, Talent Development, Talent Retention, Talent Management & various Competency Sets of Selected Employees from four key sectors of the manufacturing industry of Gujarat State						
Alternative Hypothesis no.	Alternative Hypothesis	Values for Talent Acquisition	Values for Talent Development	Values for Talent Retention	Values for Talent management	Decision
01	Greater Communication Skill competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.057*	-0.089**	-0.007	-0.060*	Negatively significant-Approved but having inverse relationship
02	Greater Interpersonal Skills, Relation building Skill competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.227**	0.184**	0.275**	0.249**	Approved
03	Greater Empathy, Influence & Persuasive competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.225**	0.210**	0.310**	0.273**	Approved
04	Greater Flexibility competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.277**	0.226**	0.324**	0.305**	Approved
05	Greater Learning competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.277**	0.218**	0.261**	0.286**	Approved
06	Greater Organisation Awareness & information seeker competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.273**	0.189**	0.303**	0.278**	Approved
07	Greater Create your own Measure of Excellence & Quality Concern competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.236**	0.251**	0.254**	0.293**	Approved
08	Greater Initiative competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.289**	0.297**	0.287**	0.349**	Approved
	Greater competencies implemented in the organisation will strengthen talent acquisition, talent development, and talent retention & Talent Management practices in the Organisations.	0.256**	0.227**	0.323**	0.305**	Approved
Note: **. Correlation is significant at the 0.01 level (1-tailed). *. Correlation is significant at the 0.05 level (1-tailed).						

Concluding remarks for the Test of Hypothesis :02:

Communication competencies among respondents revealed a negative and significant relationship between Talent Acquisition and Talent Management, with scores of -0.57 and -0.60, respectively, at the 0.05 level (1-tailed), which depicted that Talent management practices, talent Acquisition & talent development have a significant but inverse relationship; However, there is no significant relationship between Talent retention & communication competency. The overall result concludes that competency & all the functions of Talent Management has a positive & significant association which demonstrates that if any organisation wants to establish the functions & practices of talent management, one way to implement this policy is via competency. Competency-based Practices may get a strong & positive result for applying talent management practices in the organisation.

6.11.3: Hypothesis:03

Greater competency-based HR Functions implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations.

Result of Hypothesis: 03 :To find the relationship between The Competency- Based HR Functions & talent acquisition, talent development, and talent retention researcher had applied Correlation Test & Regression Based Path analysis. The result of the test were demonstrated in below table no 6.27 & 6.28:

Table Number: 6.27					
Findings of Regression and Hypotheses Testing					
Hypotheses	Testing of Hypotheses	Sample mean (M)	T statistics (O/STDEV)	P values	Decision
H1	Competency_Based_HR -> TA	0.606	18.4	0.000**	Support
H2	Competency_Based_HR -> TD	0.553	16.898	0.000**	Support
H3	Competency_Based_HR -> TR	0.723	29.828	0.000**	Support
Note: Comp_HR= Competency based HR Functions TA= Talent Acquisition, TD= Talent Development, TR= Talent retention					

Table Number: 6.28 Findings of hypothesis testing through Correlation Between Talent Acquisition, Talent Development, Talent Retention, Talent Management & various Competency Sets of Selected Employees from four key sectors of the manufacturing industry of Gujarat State						
Alternative Hypothesis no.	Alternative Hypothesis	Values for Talent Acquisition	Values for Talent Development	Values for Talent Retention	Values for Talent Management	Decision
01	Greater Competency-based Recruitment implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.301**	0.335**	0.367**	0.390**	Approved
02	Greater Competency-based Selection implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.283**	0.308**	0.376**	0.373**	Approved
03	Greater Competency-based Training & Development implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.323**	0.325**	0.387**	0.393**	Approved
04	Greater Competency-based Performance Appraisal & succession Planning implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.387**	0.340**	0.423**	0.432**	Approved
05	Greater Competency-based Compensation implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.411**	0.311**	0.516**	0.449**	Approved
06	Greater Competency-based HR policy implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.445**	0.338**	0.525**	0.475**	Approved
07	Greater Competency-based Career development implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.279**	0.356**	0.229**	0.365**	Approved
	Greater competency-based HR Functions implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations	0.417**	0.402**	0.495**	0.511**	Approved

Note: **. significant at the 0.01 level (1-tailed).

Concluding remarks for the Test of Hypothesis :03:

Findings of hypothesis testing through Correlation Between Talent Acquisition, Talent Development, Talent Retention, Talent Management & various Competency Sets of Selected Employees from four key sectors of the manufacturing industry of Gujarat State. The result of correlation & regression analysis both showcase a positive & significant relationship between the Competency-based HR functions & all practices of talent management. Which approved the null hypothesis that "Greater competency-based HR Functions implemented in the organisation will strengthen talent acquisition, talent development, and talent retention in the Organisations" If any organisation, industry or small firm wants to establish proper talent management in the organisation, they must have to follow the path of Competency-based HR functions to get desirable results.

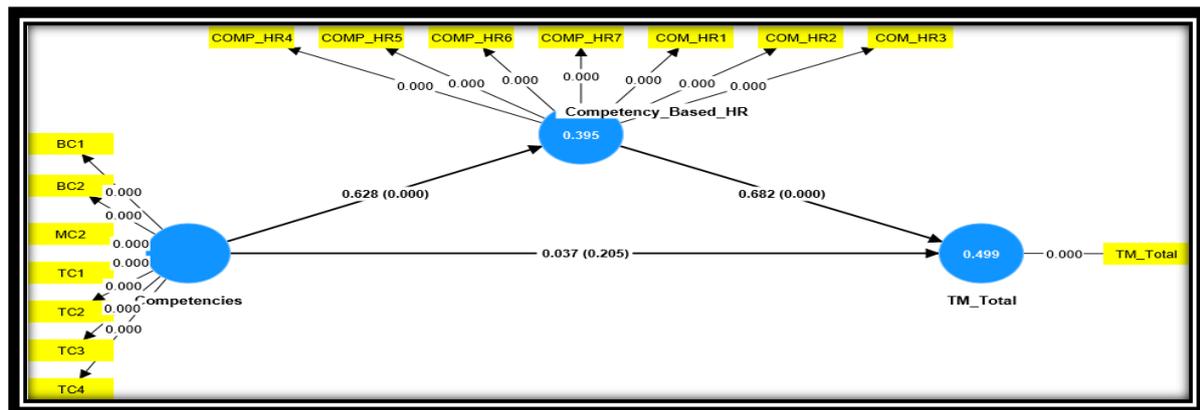
6.11.4: Hypothesis:04

“Competency-based HR functions will mediate the Competencies & Talent management in the organisation.”

Result of Hypothesis:04: For the evaluation the mediating Impact of Competency-based HR functions on Competencies & Talent management in the organisation researcher had used the smart PLS -4 Software and the result was found on the basis of Specific Effects of construct via Bootstrapping Technique.

Table Number: 6.29
Findings of Specific Indirect Effects

Specific Indirect Effects	Sample mean (M)	T statistics (O/STDEV)	P values	Decision
“Competency-based HR functions will mediate the Competencies & Talent management in the organisation”	0.43	14.042	0.000 **	Approved



Concluding remarks for the Test of Hypothesis 04:

The structural equation modelling results showcase the complete mediation of Competency-based HR functions between competency & talent management. As the direct effect between competency & talent management practices is not significantly associated, it opens a door for mediating Competency-based HR functions. And the indirect effect is significant and approves the complete mediation of Competency-based HR functions. The result strongly indicates that any organisation that wants to establish competency-based talent management practices must follow competency analysis and Competency-based HR functions.

6.11.5: Hypothesis:05

There is a significant relationship between the selected Employees' demographic variables, viz., age group, gender, Designation; Gender; Experience, and Educational Qualifications vis-à-vis their **awareness & implementation** of Competency-based HR practice(Competency Management) in the selected organisation.

Result of Hypothesis:05(A): In this hypothesis researcher want to analyse the relationship of Demographic variables with the awareness of Competencies; The demographic variables are categorical variable; To analyse the categorical variable Chi-Square test is one of the most suitable tests in social science, and the researcher applied the same. The result is given below in table no;6.30 for the awareness regarding Competencies & 6.31 For Implication Regarding Competencies in the Organisation.

Table Number: 6.30				
Findings of hypothesis testing through Chi Square analysis between selected Employees' demographic variables, viz., age group, gender, Designation; Gender; Experience, and Educational Qualifications vis-à-vis their awareness of Competency				
Alternative Hypothesis no.	Alternative Hypothesis	Values for Awareness of competency	Cramer V Values	Decision
01	There is a significant relationship between the Age & Awareness of competencies in the Organisation.	.000**	0.340	Approved
02	There is a significant relationship between the Qualification & Awareness of competencies in the Organisation	.003**	0.136	Approved
03	There is a significant relationship between the Experience & Awareness of competencies in the Organisation	.000**	0.997	Approved
04	There is a significant relationship between the Gender & Awareness of competencies in the Organisation	.000**	0.268	Approved
05	There is a significant relationship between the Level of designation & Awareness of competencies in the Organisation	.059	-	Approved

Concluding remarks for the Test of Hypothesis:05(A): Awareness of Competencies

The result of the chi-square analysis & Cramer's V test opined that the Demographic variable of selected Employees from four key sectors of Gujarat's manufacturing industry, viz Age, Education Qualification, Experience, and Gender, has a significant association with the level of awareness regarding competency. The result concludes that there is a direct relationship between these demographic variables & awareness of competencies which means Age, Education Qualification, Experience & gender of selected employees will affect the level of competency. Different levels of age groups may have different responses towards competency awareness. Different levels of Education Qualification may be biased for awareness of competency. The result depicted that a higher level of employee education results in a higher awareness & knowledge of different competencies. Experience also suggests the significant association, which analysed that higher experience of employees can result in in-depth knowledge of various competencies.

Result Hypothesis:05(B): :Implementation of Competencies

The result showcase the association between the Implementaion of Competencies Vis A vis Demographic variable of Selected Employees.

Table Number: 6.31
Findings of hypothesis testing through Chi Square analysis between selected Employees' demographic variables, viz., age group, gender, Designation; Gender; Experience, and Educational Qualifications vis-à-vis their Implementation of Competencies in the selected four key sector of Gujat's Manufacturing Industry

Alternative Hypothesis no.	Alternative Hypothesis	Age	Gender	Designation	Qualification	Experience	Decision
01	There is a significant relationship between the Demographic variables of selected employees & Implementation of Communication competencies in the Organisation.	0.483	0.448	.442	.000(0.257)	.000(.168)	Approved for Educational Qualification & Experience
	There is a significant relationship between the Demographic variables of selected employees & Implementation of Organisation Awareness & information seeker competencies in the Organisation.	0.060	.390	.052	.001(.152)	.170	Approved for Educational Qualification
02	There is a significant relationship between the Demographic variables of selected employees & Implementation of Interpersonal Skills, Relation building Skill competencies in the Organisation.	0.705	0.875	.073	.342	.235	Not approved
	There is a significant relationship between the Demographic variables of selected employees & Implementation of Empathy, Influence & Persuasive competencies in the Organisation.	0.362	.988	.035	.000(.174)	.601	Approved for Educational Qualification
03	There is a significant relationship between the Demographic variables of selected employees & Implementation Flexibility competencies in the Organisation.	0.090	.288	.021	.001(.156)	.090	Approved for Educational Qualification
	There is a significant relationship between the Demographic variables of selected employees & Implementation Learning competencies in the Organisation.	.000(0.190)	.570	.060	.000(.172)	.006	Approved for Educational Qualification & Age Group
	There is a significant relationship between the Demographic variables of selected employees & Implementation of Create your own Measure of Excellence & Quality Concern competencies in the Organisation.	0.036	.064	.084	.000(.214)	.000(.179)	Approved for Educational Qualification & Experience
	There is a significant relationship between the Demographic variables of selected employees & Implementation of Initiative competencies in the Organisation.	0.097	.531	.010	.000(.261)	.009	Approved for Educational Qualification

Concluding remarks for the Test of Hypothesis 05 (B):Implementation of Competencies

The chi-square association between the level of education and Qualification Competencies is significant in most cases, except for Interpersonal Skills, Relation building Skills. This implied no relationship exists between Education Qualifications & Interpersonal & Relation building Competencies.

The chi-square test is employed to determine the association between categorical variables in the

context of the age group of the chosen employees. The association between learning competency and the age group of employees is statistically significant, indicating that a shift in age is likely to lead to a corresponding shift in learning disposition. Numerous research studies in Organizational Behavior and Human Resource Management have demonstrated that individuals may encounter challenges in accepting change or acquiring new knowledge beyond a certain age. In the case of other competencies, the chi-square test yielded insignificant results, indicating that an individual's attitude towards these competencies may remain unchanged across different age groups.

6.11.6: Hypothesis:06

There is a significant relationship between the selected Employees' demographic variables, viz., age group, gender, Designation; Gender; Experience, Educational Qualifications vis-à-vis their implementation of Competency-Based HR practices in the Organisation

Result of Hypothesis:06: To evaluate the association between the demographic variables & Competency based HR Functions researcher used Chi-Square test of Association. The result is given below in table no 6.32.

Alternative Hypothesis no.	Alternative Hypothesis	Age	Gender	Designation	Qualification	Experience	Decision
01	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency Based Recruitment.	0.001(0.145)	.241	.118	.000(.207)	.001(.159)	Approved For AGE, Educational Qualification & Experience
02	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency Based selection.	0.146	.439	.014.	.000(.189)	.168	Approved For Educational Qualification
03	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency Based training & development.	0.066	.738	.014	.000(.295)	.006	Approved For Educational Qualification
04	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency Based Performance Appraisal & succession Planning.	0.235	.262	0.002(.275)	0.000(.173)	.239	Approved For Educational Qualification & Level of Designation
05	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency Compensation.	0.202	.490	.303	.000(.160)	.679	Approved For Educational Qualification
06	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency-based HR policies.	0.621	.814	.187	.001(.153)	.409	Approved For Educational Qualification
07	There is a significant relationship between the selected Employees' demographic variables and their implementation of Competency-based HR career development.	0.000(0.196)	.760	.358	.002(.151)	.000(.187)	Approved For Educational Qualification, Age & experience

Concluding remarks for the Test of Hypothesis:06

The findings of the study align with contemporary trends in Gender Equality, indicating that gender will not serve as a hindrance to the advancement of Human resource function with competency within organisations. Competency-based recruitment is significantly associated with AGE, Educational Qualification & Experience. This opined that change in AGE, Educational Qualification & Experience will ultimately change the opinion regarding Competency-based Recruitment. As Young people are more Job aspires compared to middle age & old age people, young age people believe in grabbing opportunities by switching jobs, whereas middle age & old age individuals more concentrates on Job security than on switching jobs. The findings also revealed that all the competencies are significantly associated with Education Qualification, which depicted that Education Qualification plays an essential role in developing & implementing Competencies for individual development, Process Development & Organizational Development. Competency-based Performance appraisal & succession planning are strongly & positively associated with the Level of Designation. As the level of designation changed, the method for evaluating & appraising performance also changed & result strongly implied that succession planning is the majority of the time concerned with upper middle level & top-level employees, which inferred that a Change in the level of designation would change the view of the employees for evaluating & appreciating the performance. Competency-based Career Development is strongly and significantly associated with the AGE, Educational Qualification & Experience. This inferred that a change in Age group would result in a change in responses towards career development. Career development in the organisation mainly focuses on young employees & middle-level employees who can be the successor to the top position. Whereas in the case of education Qualification, it is strongly associated as one of the major components for achieving career development is enrolling employees in higher education.

6.11.7: Hypothesis:07

There is no significant relationship between the selected Employees' demographic variables, viz., age group, gender, Designation; Gender; Experience, and Educational Qualifications vis-à-vis their implementation of Talent Management Practices in the selected organisation.

Result of Hypothesis:06: Chi Square test were used by researcher to evaluate the association between the demographic variable of selected Employees & Talent Management Practices in the Organisation. The result of the study listed below in graph no 6.32.

Table Number: 6.33

Findings of hypothesis testing through Chi Square analysis between selected Employees' demographic variables, viz., age group, gender, Designation; Gender; Experience, and Educational Qualifications vis-à-vis their Implementation of Competency based HR Functions in the selected four key sector of Gujat's Manufacturing Industry

Alternative Hypothesis no.	Alternative Hypothesis	Age	Gender	Designation	Qualification	Experience	Decision
01	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent Acquisition practices-1.	0.029	.590	.111	.254	.040	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent Acquisition practices-2.	0.075	.391	.439	.008	.065	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent Acquisition practices-3.	0.108	.376	.469	.006	.022	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent Acquisition practices-4.	0.062	.364	.500	.000(.210)	.007	Approved For Educational Qualification,
02	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent development practices-1.	0.414	.148	.003 (.269)	.002(.151)	.106	Approved For Educational Qualification & Level of Designation
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent development practices-2.	0.405	.474	.090	.001(.155)	.000	Approved For Educational Qualification & experience
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent development practices-3.	0.361	.673	.216	.487	.835	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent development practices-4.	0.917	.986	.710	.000(.173)	.102	Approved For Educational Qualification
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent development practices-5.	0.628	.817	.349	.000(.193)	.278	Approved For Educational Qualification
	There is a significant relationship	0.391	.169	.292	.001(.159)	.405	Approved For

	between the selected Employees' demographic variables and their implementation of talent development practices-6..						Educational Qualification
03	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent retention practices-1.	0.11	.773	.109	.326	.175	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent retention practices-2.	0.277	.239	.215	.056	.027	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent retention practices-3.	0.61	.779	.217	.395	.354	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent retention practices-4.	0.303	.166	.939	.017	.026	Not Approved
	There is a significant relationship between the selected Employees' demographic variables and their implementation of talent retention practices-5.	0.452	.860	.018	.012	.001(.153)	Approved For Educational Qualification & Experience

Concluding remarks for the Test of Hypothesis:07:

The demographic variable of the study was examined with Talent management & its components. The result of the study depicted that the majority of demographic variables are not associated with Talent management & its components, which inferred that demographic variable does not have an impact on the majority of talent management practice. Education Qualification is associated with Talent development, but the association with talent Acquisition & retention is very less. At the same time, very few Talent Development & retention practices were significantly associated with the experience. The ultimate result showcased that the majority of Talent management & its components were not biased by the Demographic variables. This inferred that If an organisation wants to establish talent management practices, it will not bias against the background variables of Employees.

6.12 : THE JOURNEY OF RESEARCH:

The research started with problem identification; in 2017, when the researcher started identifying recent problems, the researcher found that most Companies are fighting retention issues in organisations. After that, the researcher tried to evaluate this problem's root cause by studying the literature and found two root causes. One is while recruiting people company does not have proper guidelines for this, which creates ambiguity for interviews & selections; another was focusing on proper training & development of employees were missing from both the parties Employer & employees. The ultimate combination of all these problems is termed Talent Management in the literature. But the techniques for reaching accurate talent management are still missing in the literature. The researcher evaluated various ways for implementing Talent Management practices and found a connection with competency Management in the literature. Researchers could find various exploratory studies on the relationship between Competency Management & Talent Management. Still, very few studies gave empirical proof for this relation, which is also ambiguous. So researcher finally identified the topic that Competency Based HR functions (Competency Management) could be a tool for talent Management.

At the initial level of the study, the researcher focused on identifying various competencies and tried to develop a proper list of competencies. Finally, with the support of Rigor's literature review researcher found three significant groups of competencies Managerial, Behavioural & technical Competencies with its subgroups. After that researcher had done systematic Literature review to identify various Competency-based HR functions. After reviewing abstracts of 200 plus research papers, Articles & unpublished work researcher identified eight competency-based HR functions as Competency-based Recruitment, Competency-based Selection, Competency-based Training & Development, Competency-based Performance Appraisal & succession Planning, Competency-based Compensation, Competency-based HR policy, Competency-based Career development. These two independent variables are base for the overall study. The major task was to link these two independent variables with Talent Management, and for that researcher needs to find out the way to apply Talent management practices. The researcher has found three major components of Talent Management, i.e. Talent Acquisition, Talent Development & Talent Retention. The researcher developed This final analysis model, which includes five independent variables: Competencies, Competency-based HR functions, Talent Acquisitions, talent Development & Talent Retention & one Dependent major variable, i.e., Talent Management.

After developing & comprising the Literature part researcher worked on getting evidential proof, i.e. Empirical analysis. That researcher worked on the research methodology section in which the researcher identified the major Objectives, Scope, rationale & hypothesis of the study. For the selection of the sample, the researcher analysed the population first. As the "Make in India" concept is in trend nowadays and the government concentrates more on self-reliance, researchers have chosen the "Manufacturing Industry" as the population. Due to geographic limitations, the researcher concentrated only on "Gujarat state". For identifying major or key industries researcher followed the Indian Brand Equity Report, which suggests around Eight Key industries that play a significant role in the development of Gujarat state.

These industries are Agro and food processing, Textiles & apparel, Chemical & petrochemicals, Engineering

& automotive, Oil & gas, Pharmaceuticals & Biotechnology, and Shipbuilding & Tourism Industries. After getting this list, the researcher applied convenience sampling and tried to get the data from Four Key sectors among these eight key industries. As many companies come under this population, the researcher had to create a border for identifying the sample, which is the sample frame for a research study.

The researcher limited the sample by adding two caps in the sampling selections. One is that the company must have more than 100 employees, and the other criterion is that research will be conducted on Employees other than workers. Workers are excluded from this study as

this study is more concerned with developing & determining policy for Talent Management; workers may not be a part of the policy development, so that they may be biased or clueless about the analysis. Finally, the researcher identified the population of 106284 from NIC 2008 3-digit Industries report and got a sample size of 548 which is more than the threshold of 168. Ultimately this depicted an adequate sample size. The research instrument for the study is an Online Google form. The researcher must rely on the Online Google form data as the data collection period comes in the COvid-19 pandemic duration.

The researcher used SPSS 21 Software & Smart PLS-4 for the data analysis part. To get accurate results, the researcher used various statistical tools such as Frequency Analysis, ratio analysis, Correlation, Chi-Square test, Krushkal Wallis H test- One-way ANOVA for non-parametric analysis & structure equation modelling. The study's major findings indicate that as the result of frequency analysis, the oil & gas Industry performs very well compared to the other three industries. Specially Pharmaceutical & biotechnology industry was found to be weak compared to the other three industries in the applications of talent management practices in the organisation. In comparison, the agro & food industries are in a good position but cannot create the excellence as the oil & Gas industries. While the other group, which is weak compared to these two, is the Chemical & petrochemical industries & pharmaceutical & biotechnology. If the researcher needs to rank industries in developing & implementing talent Management practices, the Oil & gas Industry will stand First, then the Agro & food processing industry; third position will be held by the Chemical & petrochemical industries and last, by the pharmaceutical & biotechnology.

The result of correlation showcases that all the major constructs/ factors are correlated with each other except the Communication Competency set. As a result, it will strongly recommend that all these four key industries work for Communication Competency set in the organisation. The chi-square test findings were also insignificant in most demographic variables except the Education Qualification. The chi-square test's strong result was that all four industries have Gender Equality as Gender is not significant to any practices of Competencies, Competency-based HR functions & Talent Management Components. The Krushkal Wallis H test- One-way ANOVA for non-parametric test rejects the null hypothesis of no differentiation between the responses of employees and the level of designation. Except for talent Development, all other statements are rejected, which inferred that the level of designations makes a difference in the view of competency-based talent management practices in the organisation.

Another major result of the Kruskal Wallis H test could be found that Industry wise differences in the opinion for talent Management Practices except for Talent development practices which opined that more or less the same practices for talent development were followed by all four industries. The structural equation modelling result validates the data through assessment of the Measurement Model as all values of Convergent Validity, Discriminant Validity & reliability are up to the mark. The assessment model analysis also validates the strong predictive power of the model in the sample (R² & F²) and out of a sample (Q² predict), which opined that the model of research study could work in any other industrial sector or company too. The Path analysis – regression analysis result strongly recommended the relationship between Competency-based HR & talent Management Practices and opened the door for mediation analysis. The result of the study also identifies the presence of strong mediation of competency-based HR functions between Competency & Talent Management. It consists of the full mediation, which is the Golden feather of the study's result as it rarely comes. The last part of the study was carried out for the managers and policymakers who want to concentrate on the fewer constructs or the most important factors first. Then the subsidiary constructs, for this researcher developed an Importance Performance Map Analysis. The result of this study identifies two important constructs Talent development & competency-based HR functions. Both these factors are important, but its performance in these four industries is average. So if any manager wants to apply talent management practices in the organisation, quick concentration should be given to Talent development & Competency-based HR functions.

Finally, the researcher tried to get a solution for a major issue raised in HR nowadays, which is the retention of Good Talent in organisations through accurate talent Acquisition & Talent Development. Ultimately Proper Talent Management Practices "are very important for any organisation to survive & grow in Industry 5.0. The result of the study also showcases the pathway for applying talent Management practices via Accurate Competency Based HR functions. These HR functions are purely dependent upon three Major competencies and their subgroups. So In this study researcher developed Empirical Proof through Model Development & assessment of this model, which can be used & generalised to any industry for applying talent management practices smoothly, which can help the organisation to achieve the desired result.

6.13: IMPLICATIONS OF THE RESEARCH STUDY

6.13.1: Theoretical Implications:

The most important part of any research study is its practical and theoretical implications. This study also adds some important purview of competency, competency-based HR Functions & Talent Management practices. These implications will add some important aspects to Organisation Behaviour & human resource management theories as it is evidentially proven and can apply to any Organisation as well as industries.

- The result of the study gave an accurate list of necessary competencies to apply competency-based HR & Competency-based talent Management in any organisation. This list consists of three major competencies: managerial Competencies, Behavioural Competencies & technical competencies; these competencies were supported by their sub-group competencies. Few researchers have discussed the exact list of Competencies that ultimately leads to organisational talent management activities. The list of competencies was derived from the literature, and theories of Organisation Behaviour & Human Resource Management & psychology discipline supported each competency and their relation with competency-based HR functions & Talent Management. These competencies are general competencies that are not rigid to with particular company or Industry or a particular level of employees; these competency features enhance their applicability & generalisation.
- After reviewing hundreds of Research papers, Articles & Unpublished work, the researcher also gave eight competency-based HR functions. The result of the study indicates the strong relationship between these eight functions of HR, which is based on competencies & Talent Management practices. As HR has many functions to perform in organisations, for applying competency-based Talent Management, which type of Function was needed was the question in many pieces of literature. This study will solve the query with the proper eight competency-based HR functions, ultimately leading to Talent management components & talent Management practices in the organisation.
- Another theoretical implication from this study was the full mediation effect of competency-based HR Functions between Competency & Talent Management. The result of the study is supported by a piece of literature & empirical proof in this study.
- This type of effect to apply talent management practices in the organisation was developed & tested for the first time, which is a unique feature of the study. The study's result strongly indicated that if any Organisation wants to establish accurate Talent Management Policies in their organisation, they must concentrate on competency-based HR Functions.
- Very few researchers had talked about competency-based Talent Management practices of organisations in their study. This study is unique as it gives an accurate path for applying Talent Management Practices in organisations. The result of the study gave a list of Competencies, Competency-based HR Functions & Competency-based talent management practices, which no one has given to date. The study's result will advance the theory of Organisation Behaviour & Human resource management.

6.13.2 : Managerial Implications

This study's overall result gave some major implications which can help managers & policymakers to apply accurate Talent Management Practices in the organisation.

- In the case of Particular Competency sets, – The communication Competency set makes an inverse relationship with Competency-based HR functions & the majority of components of Talent Management amongst all the selected four key sectors of the manufacturing industries. But the literature showcase communication competency set as one of the important factors for determining the Competency-based HR functions, which creates controversy between literature & empirical analysis. But after conversations with a few managers & policymakers of selected four key sectors of the manufacturing Industry, the researcher could find that in the communication set, four major aspects of communication were asked by the researchers as listening skills, transparency in communication, feedback communication, and convincing power in which few employees were good on one or two aspects but not up to the mark for other aspects which makes overall communication set result negative. So the result of the study inferred that Managers & policy Makers of all four key industries should focus on developing a Proper communication channel in the organisation, which has the features of transparency & feedback policies. If transparency arises in the communication policy, that will ultimately develop trust in the employees, which will help top managers & employers in convincing employees better for achieving a desirable result for the organisation.
- The other and one of the most important Managerial implications were derived from the IMPA effect. The result identified two important constructs for applying quick & accurate talent management practices in the organisation, such as Talent Development & competency-based HR functions. But the performance of these two factors in selected four key sectors of the manufacturing industries of Gujarat state is near to average. This implies that all the managers & policymakers should concentrate more on developing, determining & applying these practices in their respective organisations. These two are the quick & prominent ways to apply better talent Management practices in the organisation.

6.13.2.1: Key Sector wise Managerial Implications:

- **Oil and gas industry:**
The Oil & Gas industry performs extraordinarily in most aspects of Competency, Competency-based HR functions & talent management Components, except for competency-based career development practices. This indicated that the oil & gas sectors do not have a proper and channelised career development exercise in their organisation which their employees expect. As career development is an important feature of the development of any individual for the upgradation of skills & competencies, the managers of this sector should emphasise their efforts in developing competency-based career development policies in their organisations.

The result of one way ANOVA of rank-kruskal Wallis H test also demonstrates the oil & gas industry ranks first in applying & implementing Competency-based talent management practices, which ensures the great efforts conducted by Managers & policymakers of these companies to enhance the Talent Management practices in the organisation.

- **The Agro & food Industry:** The Agro & food Industries secured the second position for making a conscious effort towards the talent management practices in their respective Organisations. The agro & food industries are doing well as it consists of the highest number of positively responded people for these constructs such as technical Competencies, Competency-based recruitment & few practices in talent acquisition and development. But it also consists of the highest Negative responses for Talent retention practices in their respective organisation. This depicted that the managers & policymakers of this industry should develop a proper retention policy as the employees are not happy with its retention policy which ultimately leads towards major absenteeism rates & turnover rates in the organisation.
- **The Chemical & Petrochemicals:** The chemical & petrochemical industries are doing well in the Communication competency set while other industries lack it. It also works well in the Technical & behavioural Competencies, but it's lacking in applying proper Competency based training & development & competency-based HR policies & talent Management components in their respective organisations. The result also demonstrated that in many constructs, this sector has the highest numbers of unaware people, which implies that this sector has an ambiguity in policy formation of Competency-based Talent Management. The manager & Policymakers should first develop a proper policy, and should it should be communicated to every individual in the organisation; another issue found in this sector was the number of negative respondents, as it didn't contain the highest number of negative persons for all constructs, but the numbers were near to highest which implies that manager should talk with the employees and tried to involve them in policy-making too. The third & important part is the implementation of these practices. Suppose employees were involved in developing & determining policies. In that case, they feel they were part of this advancement in the organisation & they may try to give their extra effort into the application part.
- **The Pharmaceutical & biotechnology:** As per the result of One way ANOVA- ranks for a non-parametric test, this sector secured the last position in the overall comparison of selected four key sectors of the manufacturing industries. As it contains the highest number of negatively responded employees & lowest number of positively responded employees for the majority of factors such as Competency, Competency-based HR & talent Management components. The result of the study implies that Manager of this sector needs to restructure their policy & programs regarding HR. As they followed the old practices of personnel management in their organisations. No change has been raised in their HR policy for a long time, which puts this sector at a stringent level. The employees found in their sectors were a little depressed compared to the other three sectors as they are not satisfied with their Compensation policy.

As a result, employees felt that the training was not meeting the market needs. The result also indicated that if managers derived the proper policy structure & implementation plans, this sector could create excellence as it contains a good number of employees who are career oriented.

6.14 : OVERALL RECOMMENDATIONS OF THE RESEARCH STUDY:

In this part, the researcher has tried to offer recommendations based on the findings and results of an empirical research study that was conducted in the selected four key sectors of the manufacturing industries of Gujarat State.

- The responses towards competency & Competency-based HR Functions differed as per Age group; the researcher recommended the employer, Managers & policymakers develop a uniform but, at the same time, flexible structure of competency-based HR functions & competencies which satisfy the needs of major Age groups and individuals. As a major group of employees were millennial, Managers could develop a policy of competency-based Talent management practices which fulfill their desire for meaningful work, Embrace Technology, Desire for work-life balance & needs for feedback. At the same time, another major part of the age group is Generation Z, whose major desires are authenticity, Transparency, Multitasking & entrepreneurial mindset. So for this, managers recommended developing a structure that satisfies the needs of both age groups of employees.
- As the level of designation increased, employees' basic needs were automatically satisfied, but the Self-actualization needs were still not touched in many cases. The manager could develop talent management practices that increase the realisation of a person's potential & self-fulfilment of employees. Which ultimately helps the organisation to retain valuable talent.
- Education Qualification plays an important role in developing & determining the policies in the organisation. Selected Employees for this study contain the highest number of employees who possess a Post Graduation degree. As education level increases, the acceptance of Competency-based HR functions & competency also increases, which emphasises the managers to develop advanced but relatively Competency-based HR policies.
- Gender has no impact on overall Competencies, Competency-based HR functions & talent Management components. This recommended Managers that Gender would not be biased in the development or applicability of Competency-based Talent Management practices in the organisations. Managers could develop policies, Programs of competency development & talent management without making any differences for male & female employees.
- The managers could use Analytics across talent Management processes to assist data-driven decision-making and help provide insights to identify areas of strength and weakness. It can help managers in cost reduction in the selection & development of Individuals.
- Managers could take the help of Artificial Intelligence for assessing the Competencies & other practices related to Talent Management. As most employees were digital natives as they are from Generation Y & Z., It will be easy for Managers to apply Analytics based Talent Management practices.

- Managers could develop Experienced-based Competency Management & Talent Management Practices, which help organisations greatly improve the employee experience with initiatives like mapping out professional journeys, improving onboarding and soliciting employee feedback and tracking surveys and reviews. Employee engagement takes the experience a step further and looks at how Top managers can work with employees to align their goals with desired business outcomes.
- Remote working, Flexible working hours & Mental health well-being are key trends after experiencing covid-19 pandemic; Managers could develop a competency-based HR policy which includes all three trends and will make the organisation flexible & more productive.

6.15 : OVERALL SUGGESTIONS OF THE RESEARCH STUDY:

The researcher has employed efforts to offer suggestions concerning significant areas where improvement is expected from the Policy Makers & Managers for the applications of Competency-based talent management practices based on their responses gathered from the selected employees from selected four key sectors of the manufacturing industries of Gujarat State.

- Competency analysis should be introduced in the initial level of HR functions. If possible, the required competencies will be given in the Job description. This will attract only candidates with this competency, which ultimately makes the job of the interviewers & candidates Easy.
- The manager should do a Periodic Assessment of Competency. This will result in better Competency development as managers will get an idea of updating or revising Competencies which will help them increase productivity in Organisations, and the employees will get an idea about their own status of Competencies.
- Competency-based HR functions should contain the feature of Uniformity for all departments and be dynamic & flexible to change. Managers can use AI-based tools for applying Competency-based HR functions for more accurate & evidence-based Practices.
- Competency mapping tools should be developed by managers, which include Clarity, transparency of desired competency, Employees' performance regarding competencies & valuable feedback systems which help Employees in the overall development of their own competencies & help the organisation in achieving the desired result.
- Managers should develop a Competency-based Employer branding which helps the organisation to attract Top talent internally & externally. Competency-based employer branding resulting in transparent & accurate policy-driven organisation. Which attracts top talent to apply to the organisation and also helps in retaining good talent within the organisation.
- For Talent Skilling & reskilling regular checking system should be developed by the organisation. If required, relevant training & development programs, seminars & exercises should be conducted by the organisation for better talent Development practices in the organisation.

- The personification reward system should develop in the organisation, which can be flexible to the designation level. Employees from the lower level were happier with cash bonuses, while the top-level employees were happier if they got perks like vacations or other prestigious gifts. This type of practice will result in more satisfaction among all levels of employees, which ultimately helps the organisation to better talent retention.
- While developing Talent retention policies in the organisation, Manager should concentrate on the age groups as the requirement & expectations are different as per generation change. So for retention of good talent, managers must focus on satisfying the needs of the existing age group, which make them feel delighted. This helps the organisation in developing better talent Retention strategies in the organisation.
- Sometimes good talent is also lacking in some technical competencies, which makes them uncomfortable and depressed in organisations. For that, managers should continuously make the interactions with talented employees to find out their difficulties while performing their tasks, and if required, proper training should be given to them. This will help the employees for better development of talent & they felt that they are important to the company and this will ultimately result into achievement of the higher goal of the organisation.
- All the practices which were talked about in this research study, such as Competencies, Competency-Based HR functions & Talent Management Practices, should be dynamic in nature as some unexpected circumstances arise in an organisation, it should be able to cope with the circumstances. This will result in a healthy workplace & work culture.

6.16 : LIMITATIONS OF THE RESEARCH STUDY:

- The research study collects primary data by filling out the structured-non- disguised questionnaire. However, all efforts were made to check, reduce and minimise ambiguous responses as provided by the selected Employees. The responses collected might lead to distorted and incorrect data information, analysis and findings of the research study.
- As this empirical study was mainly undertaken based on the collection of primary data and information mainly from the selected four sectors of the Manufacturing industry of the Gujarat state, it would be inappropriate to generalise it as fit and representative of the entire population of the Gujarat State industries.
- The research study was mainly carried out only in the selected four key sectors, Viz. Agro & Food Processing Industry, Oil & Gas, Pharmaceuticals & Biotechnology and Chemical & Petrochemical industry of the manufacturing industry of Gujarat State. This research work does not aim to cover the total picture of all Industries.
- The findings of the research study suffer from limitations of restricted sampling size, sampling design that is convenience & judgemental sampling method as followed by the researcher in the conduct and drawing of representative sampling units under this research study.
- In the research study, primary data were collected once at a point in time during the Covid-19 Pandemic time 2021. Hence cross-sectional time scale cannot be applied.
- The research study had undertaken only the selected factors of Competency, Competency-based HR functions & Talent management Components.
- In the research study, only 19 Companies Selected employees were gave their responses towards the Competency, Competency based HR functions & Talent management Components. Thus, the result cannot be applied to a specific Company.
- In the research study, the researcher studied the only positive effect of competency & competency-based HR functions on Talent management practices. Hence the researcher had not studied the negative effect or issues of employees regarding it.
- The research study was conducted by measuring the responses of Employees in the individual context. Hence lack the responses and thus applicability from the organisational & process context.
- The research study collected responses from employees of different demographic profiles. Hence the study cannot suggest more specific strategies for Employees by specific demographic variables.
- Errors due to misinterpretation or misunderstanding of Employees, intentions might or might not have affected the results of this empirical research study systematically.
- In the research study, the model was developed to measure the effect of the variables Competency, Competency-based HR functions & Talent management Components. No moderating effect was considered while developing the model.

6.17: DIRECTIONS FOR FUTURE RESEARCH STUDY:

- The findings of this research study have implications for only selected Competencies such as Managerial, Technical&behaviouralandtheir subgroups; Futurestudies canbeundertakenbyadding Gig Competencies such as Embracing Uncertainty, Creative Intelligence, Collaboration Agility etc. (Lal, 2023), which helps the employees in coping with uncertainty & Gig economy.
- The model of the study was developed based on the responses of the selected employees; Future studies can be conducted by developing a new model where all stakeholders, such as customers, suppliers, and government responses, were considered.
- The study considered Employees other than workers of the selected Gujarat Manufacturingindustries; Future study can be conducted specially for workers Competencies & talent Management practices.
- This study includes only Four sectors of Gujarat's Manufacturing industries. Other another study can be conducted for separate sectors, such as only the Oil &Gas Industry etc.
- The Indian brand Equity report of Gujarat State considered eight key sectors of Manufacturing Industries, but the representative sample is limited to only four key sectors; Future studies can be conducted for all eight Sectors as well as separate sectors. A larger sample size in future research would help in reflecting a more precise measurement of the research model.
- The researcher evaluated mediating effects of Competency-based HR functions on competencies & talent Management; Future studies can be done to test the mediating effect of talent Acquisition, Talent Development & talent Retention on Competency-based HR functions & talent management.
- The moderating effect of the Demographic variable was not assessed by the researcher in this study; In the future, Age, Gender & Education can be tested as moderators for the model. &ParticularGroupeffectswerenot measuredinthisstudy. Infuture, group-wisepanalysis alsocanbedonefor this model.

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