Research Methodology

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is how specialists need to lead their exploration. It shows how these analysts plan their concerns and level headed and present their outcome from the information acquired during the examination time frame. This exploration plan and technique section additionally show how the examination result toward the end will be procured by meeting the goal of the investigation. This part subsequently talks about the examination techniques that were utilized during the exploration interaction. It incorporates the exploration procedure of the examination from the examination methodology to the outcome dispersal. For accentuation, in this section, the creator diagrams the exploration system, research configuration, research procedure, the examination region, information sources, for example, essential information sources and optional information, population methods and test size assurance, for example, sample test size assurance and working environment site openness estimation test assurance, information assortment strategies like essential information assortment techniques including work environment site perception information assortment and information assortment through work area survey, information assortment through polls, information got from specialists assessment, working environment site openness estimation, information assortment devices pre-test, auxiliary information assortment strategies, techniques for information investigation utilized like quantitative information investigation and subjective information investigation, information investigation programming, the dependability and validity examination of the quantitative information, unwavering quality of information, dependability investigation, legitimacy, information quality administration, incorporation models, moral thought and dispersal of result and its use draws near.

To fulfill the targets of the investigation, a subjective and quantitative examination technique is sought all in all. The examination utilized these blended systems because the information was gotten from all parts of the information source during the investigation time. Along these lines, the reason for this technique is to fulfill the examination plan and target conducted by the researcher.

3.2 QUANTITATIVE OR QUANTITATIVE JUSTIFICATION

The subsequent stage in the wake of basic philosophical suppositions is the research technique. This stage is centered on the exploration plan and information assortment strategies and procedures. The decision to utilize a qualitative or quantitative technique will impact how to gather the information in later phases of the examination. This part talks about the contrasts between the two methodologies to legitimize utilizing the quantitative methodology in this examination.

According to Oberiri (2017) and Carrie (2007), their investigations set up that quantitative examination manages to measure and break down factors to get results. It includes the usage and investigation of mathematical information utilizing explicit factual procedures to address addresses like who, how much, what, where, when, the number of, and how. It likewise depicts the techniques for clarifying an issue or wandering through social affair information in mathematical structure. The investigation further uncovers those quantitative strategies can be ordered into; overview research, correlational examination, test research, and causal-relative exploration.

After the legitimization for the quantitative examination approach, the following area clarifies the information assortment procedure utilized in this exploration.

3.3 SURVEY RESEARCH METHODS

For the current research, the analyst utilized the survey approach to gathering information from the members working in different sectors for the following reasons:

Check and Schutt (2012), explained that the survey research as "the assortment of data from an example of people through their reactions to questions". This sort of examination takes into consideration an assortment of techniques to select members, gather information, and use different strategies for instrumentation. Study exploration can utilize quantitative examination procedures (e.g., utilizing polls with mathematically appraised things), subjective examination systems (e.g., utilizing open-finished inquiries), or the two methodologies (i.e., blended techniques). As it is regularly used to depict and investigate human conduct, studies are subsequently habitually utilized in friendly and mental exploration (Singleton and Straits, 2009).

Data has been acquired from people and gatherings using survey research for quite a long time. It can go from posing a couple of focused inquiries of people on a city intersection to get data identified with practices and inclinations, to a more thorough examination utilizing different substantial and dependable instruments. Basic instances of less thorough reviews incorporate advertising or political studies of shopper examples and general assessments of public sentiment.

Survey research has generally included enormous populace-based information assortment. The basic role of this kind of study research was to acquire data depicting qualities of an enormous example of people of interest generally rapidly. Huge enumeration reviews acquiring data reflecting segment and individual attributes and buyer criticism studies are perfect representations. These studies were frequently conducted through the mail and were proposed to portray segment attributes of people or acquire suppositions on which to base projects or items for a populace or gathering.

Inside the survey research approach, information is typically gathered through various techniques like mail, phone meetings, email, and self-administrated surveys. This exploration utilized oneself administrated survey as an information assortment strategy for the accompanying reasons:

- The utilization of self-administered related to individual meetings is a productive information assortment strategy that accomplishes a high collaboration rate.

- Respondents answer whenever it might suit them.

- There is no compelling reason to set up a talk with arrangements.

- Overviews have conveyed any place the mail or email goes: city or nation, home or office.

- No questioner is available to infuse predisposition in the manner questions are inquired.

- The ease of per-fulfillment makes it a practical technique for looking over huge samples.

3.4 RESEARCH DESIGN

The research configuration is planned to give a proper structure to an investigation. An extremely critical choice in research configuration measure is the decision to be made in regards to explore approach since it decides how significant data for an examination will be gotten; nonetheless, the exploration configuration measure includes many interrelated choices (KassuJilcha Sileyew, 2019).

Hence, this study employs a descriptive research design to settle on the impact of mergers and acquisitions on employees for selected units. Numerous specialists say that descriptive research depicts a precise profile of people, occasions, or circumstances. This plan offers to the specialists a profile of portrayed important parts of the wonders of interest from an individual, hierarchical, and industry-arranged point of view. Subsequently, this examination configuration has empowered the researcher to assemble information from a wide scope of respondents on the impact of mergers & acquisitions on different units in Tamilnadu. And this has helped in analyzing the response obtained on how it affects an employee perspective.

3.5 POPULATION AND SAMPLING

3.5.1 Probability and Non-Probability Introduction

This particular article (Ilker and Kabiru, 2017) realizes a well characterize blend of probability random sampling and non-probability sampling, assurance of contrasts and likenesses was seen with the techniques that are more devouring of time, financially savvy and energy-requiring or required during the examining is noticed. The two show similarities between them, the plan is to give a test that will go alone to respond to explore inquiries being scrutinized and generalizability of issues to an outside circumstance or populace that is for outer legitimacy. In the event of the distinction, the probability sampling leads to more noteworthy expansiveness in places of data from a bigger populace of units chosen that will address the gathering. At that point, the non-probability testing leads to the more prominent profundity of data with cautious choosing of cases from a few units.

The probability sampling procedures may bring about complex irregular inspecting Methods. The plan is likewise called a blended inspecting plan. Such strategies will either address a blend of probability random sampling and non-probability sampling strategy for the choice of an example. The probability sampling strategies manage quantitative has adjusted investigation that includes choice of a reasonably incredible number of units from a populace, in such a framework route that there will definitely of each component of the populace while the non-likelihood examining, is sort of testing with a degenerate or outrageous area of situations whereby choice is done best on the explicit motivation behind premium rather than purposeful choice. Non-likelihood inspecting is in some cases known as exception examining in nature. Because of the previous conversation of the testing strategies and techniques, the following area is clarifying the purposes for utilizing the comfort inspecting procedure in this examination.

The primary objective of this study is to analyze the impact of mergers and acquisitions on employees, especially those working in Banking sectors, Telecommunication sectors, Manufacturing sectors, and E-commerce sectors. The researcher has taken companies who have undergone mergers and acquisitions from the year 2016 to 2020.

3.5.2 The background for selecting these four major units is as follows

3.5.2.1 Banking Sectors

The job of banks in economic improvement is to eliminate the inadequacy of capital by animating reserve funds and speculation. A sound financial framework assembles the little and dissipated reserve funds of the local area, and makes them accessible for interest in gainful ventures. In any arrangement of financial turn of events, capital involves a place of vital significance. No financial improvement of a sizable extent is conceivable except if there is a sufficient level of capital arrangement. A vital trait of an immature economy is lack of capital which is the consequence of inadequate reserve funds made by the local area. Reverse economies scarcely save 5% of the public pay, though they should save and contribute at any rate of 15%. It is hard to perceive how, without banks, could little reserve funds be animated or even made conceivable. It is additionally hard to see who might convey these reserve funds among business people. It is credited to the banks that the local area's investment funds consequently stream into channels that are gainful.

The banks practice a level of separation which guarantees their wellbeing as well as makes ideal use of the monetary assets of the local area. We see that in India the time of monetary advancement has matched with a marvellous expansion in bank stores- and bank workplaces. Along these lines, the banks have come to assume a predominant and valuable part in advancing monetary improvement by preparing the monetary assets of the local area and by making them stream into the ideal channels. The Indian banks are presently assuming an exceptionally dynamic part in cultivating the financial improvement of the country.

3.5.2.2 Telecommunication Sectors

As globalization measures, the world is presently a worldwide town. The trend-setting innovation and more current advancement to build up the current innovation is the way to get it going. Generally speaking, the monetary exercises of monetary establishments, credit market, securities exchange, and so forth to a great extent rely upon the usage of the cutting edge innovation of correspondence. The everyday financial exercises from the government to private areas generally rely upon the accessibility of data. Agricultural nations just as in many arising economy improvements of telecom are encouraged and one of the most essential elements to improve the by and large monetary turn of events and being a piece of the worldwide town. The fast development, advancement, and commitment of media transmission innovation improve the direness of the presence of the media transmission industry in any economy as it is the mechanically generally progressed and significant instrument for sharing data just as a base for setting up monetarily significant ware market. The media transmission area improves the monetary development of a nation by associating the global monetary market as well as the homegrown monetary market and item market. Accordingly, telecom guarantees consistent progression of the extra worth in the GDP in terms of GDP development or expansion in the GDP per capita and so forth.

3.5.2.3 Manufacturing Sectors

The manufacturing sector has assumed a heavenly part in the development and advancement of any industrialized country. The arising and agricultural nations place fabricating at the driver's seat in their excursion of financial development. The portion of

assembling in GDP is along these lines an essential pointer of the meaning of the area in a nation's economy. Likewise, the customary phrases of improvement of any country, from essential area to auxiliary and afterward to the tertiary area, decide the various phases of development of assembling from low to the top and afterward sliding down, even though there remain varieties in the development direction as the advancement cycle may seek after various courses for monetary advancement of an individual country.

Fabricating has been the foundation of all created and non-industrial countries. It is the place where R&D begins, where new advances are conceived, where researchers and designers, and others are tested to grow new and better cycles, items, and innovations. "Make in India" activity is intended to take assembling to 25% of GDP. For India to understand these projections our assembling industry needs to play a huge as well as the main job. Under this activity, GoI has distinguished and found numerous ways to improve the intensity of Indian assembling associations. This has come about into India to leap to the 58th position out of 140 nations on the Global Competitiveness Index of the year 2018.

Indeed, even before GoI began, genuine endeavours through changes coordinated assembling area in India represent perfect togetherness and have spent huge endeavours in taking care of the house. While fighting with factors outside their ability to control driving Indian assembling organizations have taken part in endeavours to decrease fabricating costs, improve quality, perspiring the resources and improve profitability. A large portion of the main Indian assembling organizations have embraced a-list assembling or assembling greatness works on utilizing procedures like TPM, TQM, Six-Sigma, and Lean. Since 2003, Indian organizations have won 401 JIPM TPM grants which are most elevated for any country outside Japan. Indian organizations have won 38 Deming Prizes – the most elevated worldwide acknowledgment for TQM execution. India has the most US FDA endorsed pharma plants outside the US. Assembling Excellence is a drawn-out responsibility and center competency for assembling pioneers. Make in India will be genuinely effective just on the off chance that we can construct a culture of Manufacturing Excellence across lion's share of the plants. This assignment is very overwhelming and would call for substantially more cooperation among assembling organizations worked with by industry and exchange affiliations. Some sort of ordering and boosting from the public authority would help in building up momentum.

3.5.2.4 E-Commerce Sectors

Online business has changed how business is done in India. The Indian E-business market is relied upon to develop to US$ 200 billion by 2026 from US$ 38.5 billion starting in 2017. A large part of the development for the business has been set off by an expansion in web and cell phone entrance. As of August 2020, the number of web associations in India altogether expanded to 760 million, driven by the Digital India program. Out of the absolute web associations, 61% of associations were in metropolitan regions, of which 97% associations were remote.

The primary objective of this study is to evaluate the mediating role of OCB on HRM practices and individual outcomes among production engineers especially working in research & development, product & design, and quality checking departments from various manufacturing industries such as auto components, textile types of machinery, home appliances and electric & motor pumps in Coimbatore district of Tamilnadu. A total of 430 respondents were considered and purposive sampling was used to assess the opinions of production engineers regarding HRM practices, OCB, Engagement level, and Turnover intention. Out of the above, only 409 questionnaires were returned and found to be at a reusable level resulting in a response rate of 95%. Data collected through the questionnaire has been analysed to fulfill the objectives of the study. E-Commerce business is a developing area in India. Like the development of the IT industry in India through the 1990s, the 2010s will be associated with the development in the E-Commerce industry. In its current expression, the commitment of E-Commerce to GDP is around 0.2% which is required to grow multiple times to around 2.5% by 2030.

The effect is enormous to such an extent that the current rush of de-adaptation might have not been thought of if E-Commerce did not exist. Online business generally retained its stun just as acquired the greatest out of it too. After the underlying flood of B2C E-Commerce, the B2B area is acquiring a great deal of footing. 95% of the business in the B2B area is still unorganized and E-Commerce will help sort out by utilization of innovation and other help capacities. The effect of the E-Commerce industry is as yet in the beginning stage however is obvious.

The effect right now can be found in the accompanying areas:-Innovation is one of the significant drivers of innovation will be the E-Commerce industry and the other way around. We are seeing new age mechanical solutions such as artificial intelligence and machine learning) being taken up to take care of the business issues to carry trade to everybody carefully. This is seen in both B2C and B2B areas. Interest in the innovation area is ending up driving development in the E-Commerce space.

Coordination's Logistics industry is both a bottleneck and a driver for the internet business industry. For a similar, we perceive how last mile and between city coordination's arrangements have come up to carefully associate the various partners the nation over. The Uber model of moving travellers is executed in some structure or the other in the strategic area. The development of E-Commerce will drive advancement in the strategic area to make the items accessible to the end client.

3.5.2.4.1 Travel- Right now 70% of the commitment to E-Commerce comes from the movement area which incorporates online ticket appointments to other travel courses of action. This has made the market serious by welcoming all players on a similar stage and has additionally given shoppers more alternatives. The travel industry will be the most punctual adopters to turn out to be digitized and that is on account of E-Commerce.

Schooling one of the enterprises that have the most significant effect on E-Commerce is instruction. The capacity of E-Commerce to give quality instruction to everybody is huge. India will have one of the greatest arrangements of youth populace and thus the degree for schooling area to be the greatest achievers because of E-Commerce is certain.

3.5.2.4.2 E-Retail- The banner conveyors of the E-trade wave have been the different E-Retail business stages. The E-Retail area is projected to add to around 3% of the absolute Retail sales by 2020 and is at present around 1%. This wave is seen in both B2C and C2C models and will undoubtedly become further. This isn't just for products yet additionally has caught the food area.

3.5.2.4.3 Different Industries - The method of working in the Real Estate area is as of now seeing the change in light of the E-Commerce industry. This will change further with all property-related exchanges coming on the web and getting shut online too. The banking area is profiting too with diminished activities cost of online exchanges.

Web-based business in medical services has brought wellbeing-related answers for metropolitan India and will additionally infiltrate profound into Tier I and Tier II urban areas.

3.5.2.4.4 Banking Industries- There are different help ventures which have been created in light of E-Commerce. These are advanced promoting, examination, instalment passages and so on these will become billion dollars areas as E-Commerce develops dramatically.

The E-trade industry has been straightforwardly affecting small and medium ventures (MSME) in India by giving methods for financing, innovation, and preparing and has a good falling impact on different enterprises too. Indian E-business industry has been in an upward development direction and is required to outperform the US to turn into the second biggest E-trade market on the planet by 2034. Innovation empowered advancements like computerized installments, hyper-neighbourhood coordination, investigation-driven client commitment, and advanced promotions will probably uphold the development in the area. The development in the E-business area will likewise support work, increment incomes from trade, increment charge assortment by ex-chequers, and give better items and administrations to clients in the long haul. Ascend in cell phone utilization is required to rise 84% to arrive at 859 million by 2022.

11 mergers happened during the year 2016-2020. From that, the researcher concentrates on four major streams only as Banking sectors, Telecommunication, Manufacturing units, and E-commerce units. Out of 11 companies, one company (National Institute of Miners' Health (NIMH) & Housing.com) doesn't come under the four major categories, then out of the remaining 10 companies, only seven companies permitted data collection.

50 acquisitions happened during the year 2016-2020. Out of 50 companies, some companies don't come under the four major streams and some companies don't operate in Tamilnadu state. Companies such as Kaleidoscope Innovation, GSK Consumer, Yatra didn't permit to collect data.

Table 3.1

Merged and Acquired Companies

Merged Companies					
S. No.	**Name of The First Company**	**Name of The Company Merged With**	**Year in which it was Merged**	**Industry Type**	**Region**
1	Indus Towers	Bharti Infratel	2020	Telecommunication	Coimbatore
2	Indiabulls Housing Finance Limited (IBHFL) and Indiabulls Commercial Credit Limited (ICCL)	Lakshmi Vilas Bank Limited (LVB)	2019	Banking sector	Coimbatore
3	Bank of Baroda	Vijaya Bank and Dena Bank	2019	Banking sector	Coimbatore
4	IndusInd Bank	Bharat Financial (SKS Microfinance)	2019	Banking sector	Erode
5	Vodafone India	Idea Cellular	2018	Telecommunication	Tirupur
6	TATA Steel	ThyssenKrupp	2018	Manufacturing Sector	Coimbatore
7	Flipkart	E-bay India	2017	E-Commerce	Coimbatore
Acquired Companies					
S. No.	**Acquiring Company**	**Acquired Company**	**Year of Acquisition**	**Industry Type**	**Region**
1	Reliance Retail	Future Group's Retail Business	2020	E-Commerce	Chennai
2	Walmart	Flipkart	2018	E-Commerce	Coimbatore
3	Tata Steel	Bhushan Steel	2018	Manufacturing	Coimbatore
4	Zomato	Uber Eats	2020	E-Commerce	Coimbatore
5	Advent	International Enamor	2019	Manufacturing	Chennai
6	LIC	IDBI bank	2019	Banking	Coimbatore
7	Axis Bank	Freecharge	2017	Banking	Chennai
8	Bharti Airtel	Tikona	2017	Telecommunication	Coimbatore
9	Bandhan Bank	Gruh Finance	2019	Banking	Nasiyanur

Source: https://byjus.com/govt-exams/mergers-acquisitions-india/

3.5.3 Selection of District and Sample Size Calculation

Since the companies selected for this particular study are distributed throughout various regions in Tamilnadu, the researcher has used convenience sampling to select the regions. And also, the number of employees working in all four streams (Banking, Telecommunication, Manufacturing, and E-Commerce) was not exactly determined by the researcher, the following formula has been formulated to calculate the sample size.

The determination of the sample size was adopted from Daniel and Cochran formula. The formula used was for unknown population size Eq. (1) and is given as

$$n = z^2 \, p(1-p)/d^2$$

where n = sample size, Z = statistic for a level of confidence, P = expected prevalence or proportion (in proportion of one; if 50%, P = 0.5), and d = precision (in proportion of one; if 5%, d = 0.05). Z statistic (Z): for the level of confidence of 95%, which is conventional, the Z value is 1.96. In this study, investigators present their results with 95% confidence intervals (CI).

$n = (1.96)^2*0.5(1-0.5)/(0.05)^2$

$n = 3.8416*0.5(0.5)/(0.05)^2$

$= 3.8416*0.25/0.0025$

$= 0.9604/0.0025$

$= 384.16$

A total of 550 questionnaires were distributed to employees of different units. The companies had undergone the most recent mergers in each sector from 2016 to 2020. Respondents were identified by each company's HRs department and selected through stratified sampling. The inclusion criterion was that the respondents had worked for the company for at least two years in total, including time both before and after the merger process. In total, 483 questionnaires were returned, with a response rate of 87.81%. Of these, 453 were complete and suitable for analysis.

3.5.4 Non-Response Bias

Non-response inclination alludes to the slip-up one hopes to make in assessing a populace trademark dependent on an example of overview information in which, because of non-reaction, particular sorts of study respondents are under-addressed. Social researchers regularly endeavour to make inductions about a populace by drawing an arbitrary example and contemplating connections among the estimations contained in the example. At the point when people from an exceptional subset of the populace are deliberately overlooked from a specific example, in any case, the sample can't be supposed to be "irregular", as in each individual from the populace is similarly liable to be remembered for the sample. Recognize that any samples revealed in investigating a non-arbitrary sample doesn't give legitimate grounds to making speculations regarding a populace similarly that examples present in an irregular example do. The crisscross between the normal qualities of respondents in a non-irregular sample and the normal attributes of the populace can prompt significant issues in understanding the reasons for social wonders and may prompt misled strategy activity. Consequently, extensive consideration has been given to the issue of non-reaction inclination, both at the phases of information assortment and information investigation (Berg Nathan, 2005).

The non-response predisposition happens when the individuals who react vary in the result variable from the individuals who do not react. The kind of information assortment techniques generally influences the idea of predisposition. For instance, a high non-response inclination happens when utilizing a postal overview, phone, or even meeting. For the current study, considering that better-taught individuals (i.e., understudies) will return the survey at a sensible rate contrasted with the individuals who are less instructed and trying to decrease the inclination to least, this research utilized a paper-based questionnaire to gather the information.

3.6 DATA COLLECTION DEVELOPMENT

3.6.1 Sources of Data

This study is based on primary and secondary data. The primary source was a direct personal interview through a survey instrument administered to the respondents by the investigator. The secondary data was collected from the previous research articles, books, and internet resources.

3.6.2 Construct Development

The interview schedule has been divided into five parts. The first part of the interview schedule deals with the demographic profile of the respondents. The second part deals with the Organizational Culture (i.e.) Welfare activities (4 variables), Innovation (4 variables), Control (4 variables) and Outcome orientation (4 variables), Level of Integration (5 Variables). The third part deals with Change Management (i.e.) Employee Involvement (5 variables), Attitude of Employees (5 variables), Team building (5 variables), and Loyalty (5 variables). The fourth part of the questionnaire measured the Engagement level of employees (i.e.) Working Environment (5 variables), Compensation & Benefits (4 variables), Career growth and advancement (5 Variables), Intrinsic Motivation (5 Variables), and Organizational Commitment (3 variables). The fifth part of the questionnaires measured employee morale (i.e.) Personal satisfaction (5 variables), Appreciation (5 variables), Social status (6 variables), and Supervision (5 variables). And the final part of the questionnaire evaluates the Stressors factor (i.e.) Psychological Factors (5 variables), Work culture factors (5 variables). All the variables taken up for consideration in this study were measured with 5 points Likert scale with the range of 1 – Strongly disagree to 5 – Strongly agree.

3.6.3 Methods to Achieve High Rate of Response

The following steps were followed in this research to enhance the response rate and eliminate non-response bias:

The variables inside the poll were estimated either as ostensible or 5-point Likert scale so members can focus on the inquiries.

- The survey utilizes simple and straightforward language and dodges the utilization of open-finished inquiries. For instance, individual and segment data were put at the initial segment of the poll so respondents will be urged to occur in the examination.

- In request to support investment and draw in interest, an intriguing covering letter clarifying the reason and effect of the investigation was given to every member before his/her cooperation. It likewise shows that their data will remain stringently secret. Keeping at the top of the priority list the intricacy of the proposed model, the specialist delivered a short and brief survey and kept away from the utilization of dull or tiresome inquiries.

3.7 PRE-TESTING THE QUESTIONNAIRES

3.7.1 Expert Knowledge (Content Validation)

Since the questionnaires were taken from a different source, before entering into the main study analysis, validating the same is necessary. For this purpose, the researcher used two methods one is content validation in the form of expert knowledge and the other method is from potential participants.

Content validation alludes to a cycle that intends to confirm that an instrument measures the substance region it is relied upon to gauge (Colin and Andrew, 2014). One way of accomplishing content legitimacy includes a board of topic specialists thinking about the significance of individual things inside an instrument. Lawshe's strategy, at first proposed in an original paper in 1975 (Lawshe, 1975), has been broadly used to build up and evaluate content legitimacy in assorted fields counting medical care, instruction, authoritative turn of events, faculty brain science, what's more, statistical surveying. It includes a board of topic "specialists" rating things into one of three classes: "fundamental", "helpful", however not "fundamental", or "excessive". Items considered "fundamental" by a basic number of board individuals are then included inside the last instrument, with things neglecting to accomplish this basic level disposed of. Lawshe (1975) recommended that dependent on "set up psychophysical standards", a degree of half understanding gives some affirmation of substance legitimacy.

$$CVR = ne - (N/2)/N/2$$

The CVR (content legitimacy proportion) proposed by Lawshe (1975) is a straight change of a corresponding degree of concession to how many "specialists" inside a board rate a thing "fundamental" determined in the accompanying where CVR is the substance legitimacy proportion, ne is the number of board individuals demonstrating a thing "fundamental", and N is the number of board individuals.

For this study, the researcher approached five subject expert panels and got everyone's view. Based on the panel members' suggestion, certain questions had changed and certain questions had been replaced with new content. Finally, the final questionnaire has been proposed for the study.

The calculation had done in EXCEL. By using the formula:

= ROUND ((COUNTA ($B2:$F2)-

COUNTA($B$1:$F$1)/2)/(COUNTA($B$1:$F$1)/2),3).

Table 3.2

Content Validation

ITEMS	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	CVR
Cares about health and welfare of employees		x	x	x	x	0.6
Encourages teamwork, competition and cooperation among employees	x			x	x	0.2
Gives recognition and rewards to employees when deserved	x	x	x	x	x	1
Amicably solves conflicts among employees	x			x	x	0.2
Is receptive to new ways of doing things	x	x	x	x	x	1
Encourage creativity	x	x	x	x	x	1
Challenges employees to give their best effort	x	x	x	x	x	1
Allows employees to adopt his/her own approach to the job	x		x		x	0.2
Provides autonomy in decision-making to employees	x	x		x	x	0.6
Adheres to formal rules and procedures	x	x			x	0.2
Ensures communication between departments	x	x	x	x	x	1
Explain reasons for actions/decisions to all employees	x		x		x	0.2
Takes long term view	x	x	x	x	x	1
Acts in a responsible manner towards customers	x	x	x	x	x	1
Considers my work to meet important ends	x	x	x	x	x	1

ITEMS	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	CVR
Make me feel related to my involvement in work	x			x	x	0.2
Reviews every aspect of the system	x	x	x	x	x	1
Ensures relationship, authority and harmonization		x	x		x	0.2
Integrates organizational structure of the enterprise	x	x		x	x	0.6
Provides a clear understanding of my role within the organization	x	x	x	x	x	1
Provides employees with action plan, adequate information and educates them on the change processes	x	x	x	x	x	1
Publicizes new managerial initiatives in the course of time	x			x	x	0.2
Encourages employees to influence managerial actions	x	x	x	x	x	1
Adequately represents employees in change management committees		x	x		x	0.2
Takes steps to overcome signs of resistance to accept the change initiative	x	x	x	x	x	1
There is a high level of trust in the organisation	x	x	x	x	x	1
I am satisfied with the change process and do not feel uncertain about my future	x	x	x	x	x	1
The organisational change has resulted in reduced absenteeism	x	x	x	x	x	1
The change has reduced employee turnover	x		x		x	0.2
The change has generated positive employee work attitude	x	x		x	x	0.6
Changes that may affect me are communicated to me prior to implementation	x	x			x	0.2

ITEMS	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	CVR
Everybody is treated fairly in my organization and employee performance evaluations are fair and appropriate	x	x		x	x	0.6
There is never a pressure to finish my work on time	x	x	x	x	x	1
I strongly align with the work policies of the organization resulting from the change management	x	x	x	x	x	1
There are things in my work environment that I find new	x	x		x	x	0.6
I am satisfied with the reward/ incentive schemes for good performances	x	x		x	x	0.6
My organization has good retirement and insurance plans and vacation pay	x	x		x	x	0.6
My organization provides me sufficient training as and when I need to perform my job well	x	x	x	x	x	1
I feel secure in my job	x	x	x	x	x	1
I trust my organization will consider me for a promotion if I do a good job	x	x	x	x	x	1
I think that I am able to progress in my job	x	x	x	x	x	1
My organization is actively interested in my professional development and advancement			x	x	x	0.2
I plan to continue my career with my organization for at least 2 more years	x	x	x	x	x	1
My job satisfies my personal needs	x	x	x			0.2
There is a strong feeling of teamwork and cooperation in my organization	x	x		x	x	0.6
The environment in this organization supports a balance between work and personal life	x	x	x	x	x	1

ITEMS	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	CVR
My job does not cause unreasonable amount of stress in my life	x	x	x	x	x	1
I have regular information and a good understanding of the vision, mission and goals of my organization			x	x	x	0.2
I constantly look for better ways to do my job well	x	x	x	x	x	1
Merger affected my commitment towards the organization	x	x	x	x	x	1
I willingly devote time and energy to work	x	x	x	x	x	1
I am involved in my occupation	x	x	x	x	x	1
I feel my organization is really a good place to work	x	x	x	x	x	1
My work gives me a feeling of personal accomplishment	x		x		x	0.2
I am satisfied with the information received from management on happenings in the company	x	x	x			0.2
I am satisfied with the opportunities provided by the company	x	x		x	x	0.6
My contribution to the organization is valued and appreciated	x	x		x	x	0.6
I feel like I am part of a team	x	x	x	x	x	1
I feel I am recognized and respected at the workplace and taken care of by the organization	x	x	x			0.2
I feel employees are appreciated in my organization	x	x		x	x	0.6
I have the opportunity to do what I do best every day	x	x	x	x	x	1
I feel have I received recognition or praise for doing good work	x	x	x	x	x	1
My teammates have a proud feeling to work in the organization	x	x	x			0.2
I feel proud to be a part of this organization	x		x	x	x	0.6

ITEMS	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	CVR
I enjoy working with my team members	x		x	x		0.2
I consider my job as an important aspect of life	x	x	x	x	x	1
My occupation/ career has special personal value to me			x	x	x	0.2
I am highly involved in various aspects of my organization	x	x	x	x	x	1
My supervisor helps me by playing his role to improve the working environment in the organization	x	x	x			0.2
My morale and productivity level have been increased in the workplace by supervisors	x	x		x	x	0.6
My supervisor encourages my special talent	x	x	x	x	x	1
Healthy work relation exists with supervisors or managers	x	x	x	x	x	1
My supervisor or someone at work, seems to care about me as a person	x	x	x	x	x	1
Uncertainty & Insecurity			x	x	x	0.2
Job loss & Job changes	x	x		x	x	0.6
Compensation Changes	x		x	x		0.2
Changes in Power, Status, Prestige & Growth	x	x	x	x	x	1
Responsibility & Work itself	x	x	x			0.2
Working Hours	x	x		x	x	0.6
HR Practices	x	x	x	x	x	1
Designation & Change in Branch	x	x	x	x	x	1
Reporting System & Company Policy	x	x	x	x	x	1
Supervision & Relationship with peers			x	x	x	0.2
CVR (Critical) for a panel size (N) of 5 is 1						0.714

CVR values assortment between −1 (perfect disagreement) and +1 (perfect agreement) with CVR values above zero representing that over half of the panel members agree an item important.

3.7.2 Potential Participants

Using convenience sampling 40 respondents were selected from the four sectors and the questionnaires were distributed to test the readability and easiness of the questionnaire items. Out of 40 respondents, 33 were returned with proper answers. It shows the high response rate (82.5%) which gives the validation for the items. This stage was perilous to apprehension potential wording uncertainties, struggle, length, and timing of the questionnaire. Based on certain inconveniences faced by the respondents some wordings and length were changed. Overall, the success of this validation is satisfactory.

3.7.3 Pilot Study - Validity (Face Validity) and Reliability

It was vital for the pilot to test the variables preceding its utilization inside this investigation to look at the legitimacy and dependability of the instrument and to improve questions, configuration, and scales. A pilot study was directed to the respondents before the genuine questionnaires were appropriated. The main reason for the pilot study was to guarantee the coherence, clearness, and effortlessness of the variables and to check if the information gathered answers the researched questions and gives face legitimacy (Presser et al., 2004). The researcher, at this point, investigates the information to find any disadvantages or likely dangers inside the variables and subsequently, choices can be made concerning the things to be erased, kept, or even added.

As the items were drawn from several scales, a pilot study was carried out to ensure that each subscale was internally consistent. Data collected from the sample of 100 employees working in different units such as banking, telecommunication, manufacturing, and e-commerce were tested. The analysis of these responses showed that the internal consistency estimated (Cronbach's Alpha) for the 18 scales of the study ranged from 0.753 to 0.941. The inspection of the item-to-total correlation showed all items correlated highly with their totals except 5 items which were dropped (1 item from each of innovation, outcome orientation, compensation & benefits, organizational commitment, and supervision).

3.7.4 Pilot Study Results

Reliability is the interior consistency and repeatability of the destitution file that is the way firmly related the arrangement of UBN things are collective. Classical Test Theory (CTT) characterizes dependability regarding the connection between the 'valid' score and the perceptible score, which are affected by a scope of different factors all in all known as arbitrary 'blunder'. In CTT, unwavering quality is the extent of the noticed change owing to the non-blunder genuine scores (Maria and Pablo, 2020). The CTT approach has been changed with the advancement of the current estimation hypothesis (Latent Variable Approach). Unwavering quality is worried about how well an experimental measure measures one basic idea. That is, how much data noticed hardships contain regarding the fundamental wonder causing them that is neediness. Item Response Theory (IRT) depends on more impressive measurable strategies than CTT; however, it makes more presumptions. A result of dependability is that the markers would rank the populace appropriately from the more awful off to the good.

The surveys were appropriated to an accommodation test of N=100 employees combining all the four units and the time duration of about twenty-five days of which 79 were returned which show a high reaction rate (79%). The number of usable surveys was 79 addressing the normal focused on example regarding age, sex, and so on were investigated. The culmination season of the survey was 15 minutes which is generally sensible. Because of the ideas of the respondents and the outcomes of the fundamental measurable investigation, the researcher eliminated and adjusted a few inquiries.

Table 3.3

Pilot Study Results

Factors	Number of Items	Cronbach Alpha	Inter-Item Correlation	Item-to-Total Correlation
Welfare Activities	4	.931	.701 - .879	.811 -.899
Innovation	4	.862	.745 -.953	.845 -.943
Control	4	.881	.467 -.823	.656 -.778
Outcome Orientation	4	.834	.434 -.956	.545 - .823
Level of Integration	4	.875	.529 - .676	.677 - .789
Employee Involvement	5	.901	.611 - .845	.756 - .958
Attitude of Employees	5	.922	.820 - .865	.889 - .897
Working Environment	5	.834	.734 - .745	.725 - .745
Compensation and Benefits	4	.872	.356 - .889	.556 - .778
Career Growth and Advancement	5	.941	.562 - .838	.645– 891
Intrinsic Motivations	5	.793	.401 - .778	.687 - .801
Organisational Commitment	3	.923	.602 - .884	.781 - .878
Personal Satisfaction	5	.892	.645 - .796	.747 -.780
Appreciation	5	.753	.590 - .746	.667 - .782
Social Status	6	.721	.701 - .845	.759 - .883
Supervision	5	.811	.637 - .829	.729 - .883
Psychological Factors	5	.829	.601 - .799	.859 - .893
Work culture Factors	5	.792	.701 - .856	.745 - .756

3.8 PRELIMINARY EXAMINATION OF THE MAIN STUDY

3.8.1 Data Screening

Data screening fulfillment in any multivariate investigation is critical and fills in as the establishment for any significant result from a quantitative examination. The quality and the yield of a worthy examination are dependent upon the nature of introductory information screening. Shockingly, this phase of exploration is less attempted by the beginner specialist potentially, as a result of the weight-related with it. Disregarding this stage would frequently prompt low quality of yield and accuracy of the kind of investigation to be utilized. Although are of the assessment that the primary methods of guaranteeing the exactness of information are by editing the first information in connection with the PC-created information to record, this methodology may have been reasonable with a little arrangement of information. Even with a huge informational index, editing

becomes bulky requiring the requirements to examine information through graphic insights utilizing accessible PC software. Using PC programming benefits the analyst of the chance of finding cover-up mistakes that probably would not be feasible to be found utilizing alternate ways. Further, Hair et al. (2010) detailed that performing information screening and assessment profit a specialist with at any rate two significant advantages.

3.8.2 Missing Data

Finding missing data and fixing that in an initial stage before entering into any main analysis becomes very vital in social science research. The main reason to incorporate this methodology is to eliminate any unanswered dataset as well as to find out any human error that occurred during the data entry process. The researcher sorts out this issue by performing missing data analysis in excel. COUNTBLANK option in excel is highly guiding social science research entries in a meaningful manner. As an output of this analysis, the researcher makes sure that no data is missed which leads the further analysis to a meaningful phase. The analysis part is performed in excel and the screenshot of the same is added for reference.

Figure 3.8.2.1: Missing Data Analysis
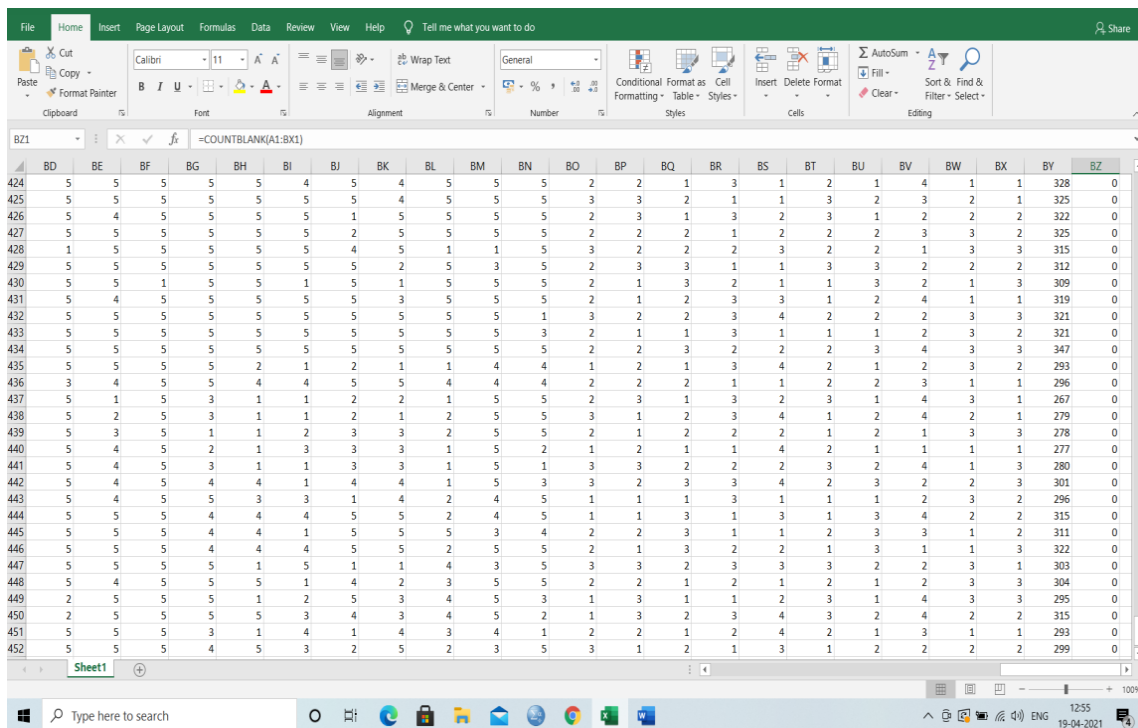
	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ
424	5	5	5	5	5	4	5	4	5	5	5	2	2	1	3	1	2	1	4	1	1	328	0
425	5	5	5	5	5	5	5	4	5	5	5	3	3	2	1	1	3	2	3	2	1	325	0
426	5	4	5	5	5	5	1	5	5	5	5	2	3	1	3	2	3	1	2	2	2	322	0
427	5	5	5	5	5	5	2	5	5	5	5	2	2	2	1	2	2	2	3	3	2	325	0
428	1	5	5	5	5	5	4	5	1	1	5	3	2	2	2	3	2	2	1	3	3	315	0
429	5	5	5	5	5	5	5	2	5	3	5	2	3	3	1	1	3	3	2	2	2	312	0
430	5	5	1	5	5	1	5	1	5	5	5	2	1	3	2	1	1	3	2	1	3	309	0
431	5	4	5	5	5	5	5	3	5	5	5	2	1	2	3	3	1	2	4	1	1	319	0
432	5	5	5	5	5	5	5	5	5	5	1	3	2	2	3	4	2	2	2	3	3	321	0
433	5	5	5	5	5	5	5	5	5	5	3	2	1	1	3	1	1	1	2	3	2	321	0
434	5	5	5	5	5	5	5	5	5	5	5	2	2	3	2	2	2	3	4	3	3	347	0
435	5	5	5	5	2	1	2	1	1	4	4	1	2	1	3	4	2	1	2	3	2	293	0
436	3	4	5	5	4	4	5	5	4	4	4	2	2	2	1	1	2	2	3	1	1	296	0
437	5	1	5	3	1	1	2	2	1	5	5	2	3	1	3	2	3	1	4	3	1	267	0
438	5	2	5	3	1	1	2	1	2	5	5	3	1	2	3	4	1	2	4	2	1	279	0
439	5	3	5	1	1	2	3	3	2	5	5	2	1	2	2	2	1	2	1	3	3	278	0
440	5	4	5	2	1	3	3	3	1	5	2	1	2	1	1	4	2	1	1	1	1	277	0
441	5	4	5	3	1	1	3	3	1	5	1	3	3	2	2	2	3	2	4	1	3	280	0
442	5	4	5	4	4	1	4	4	1	5	3	3	2	3	3	4	2	3	2	2	3	301	0
443	5	4	5	5	3	3	1	4	2	4	5	1	1	1	3	1	1	1	2	3	2	296	0
444	5	5	5	4	4	4	5	5	2	4	5	1	1	3	1	3	1	3	4	2	2	315	0
445	5	5	5	4	4	1	5	5	5	3	4	2	2	3	1	1	2	3	3	1	2	311	0
446	5	5	5	4	4	4	5	5	2	5	5	2	1	3	2	2	1	3	1	1	3	322	0
447	5	5	5	5	1	5	1	1	4	3	5	3	3	2	3	3	3	2	2	3	1	303	0
448	5	4	5	5	5	1	4	2	3	5	5	2	2	1	2	1	2	1	2	3	3	304	0
449	2	5	5	5	1	2	5	3	4	5	3	1	3	1	1	2	3	1	4	3	3	295	0
450	2	5	5	5	5	3	4	3	4	5	2	1	3	2	3	4	3	2	4	2	2	315	0
451	5	5	5	3	1	4	1	4	3	4	1	2	2	1	2	4	2	1	3	1	1	293	0
452	5	5	5	4	5	3	2	5	2	3	5	3	1	2	1	3	1	2	2	2	2	299	0

3.8.3 Validation

To validate the variables the researcher, execute the correlation analysis. To perform this analysis first, all the data were summed up in excel. After that, the calculated data were executed in SPSS by using correlation analysis. The result of the same is attached as an image for justification. The researcher checked the significance level value with 0.05. It was found that all the values are lesser than the significance value which proved that all the data is normal.

Figure 3.8.3.1: Validation of the Variables (Correlation)

Personal Satisfaction	Appreciation	SocialStatus	Supervision	Employee Involvement	Attitude Of Employees	Working Environment	Compensation Benefits	Career Growth Advancement	Intrinsic Motivations	Organizational Commitments	Psychological Factors	WorkCulture Factors	Total
.159	-.011	.051	.105	.017	.201	.208	.187	.189	-.006	.043	-.057	.057	.235
.001	.808	.281	.026	.721	.000	.000	.000	.000	.906	.364	.227	.225	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.058	-.059	.167	-.016	.112	.306	.110	.274	.223	-.144	.162	.030	-.021	.248
.215	.212	.000	.732	.017	.000	.019	.000	.000	.002	.001	.522	.651	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.104	.046	.185	.080	.043	.130	.157	.175	.146	.001	.280	-.007	-.022	.254
.026	.332	.000	.089	.360	.005	.001	.000	.002	.980	.000	.882	.633	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.199	.113	.203	.138	.186	.155	.570	.199	.228	.048	.162	.010	.090	.387
.000	.016	.000	.003	.000	.001	.000	.000	.000	.312	.001	.834	.055	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.188	.064	.224	.073	.180	.150	.600	.151	.190	.033	.174	-.071	-.091	.324
.000	.171	.000	.120	.000	.001	.000	.001	.000	.479	.000	.129	.054	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.033	-.011	.191	.009	.179	.228	.641	.192	.158	-.076	.138	.008	.032	.332
.480	.808	.000	.850	.000	.000	.000	.000	.001	.108	.003	.859	.500	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.219	.018	.258	.121	.181	.248	.609	.194	.218	.016	.235	-.012	-.016	.381
.000	.698	.000	.010	.000	.000	.000	.000	.000	.729	.000	.800	.728	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.184	.160	.101	.233	.110	.209	.195	.355	.214	.099	.136	-.066	.031	.366
.000	.001	.032	.000	.019	.000	.000	.000	.000	.034	.004	.163	.507	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.144	.105	.180	.017	.204	.281	.147	.600	.222	.125	.102	.083	.042	.294
.000	.698	.000	.010	.000	.000	.000	.000	.000	.729	.000	.800	.728	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.184	.160	.101	.233	.110	.209	.195	.355	.214	.099	.136	-.066	.031	.366
.000	.001	.032	.000	.019	.000	.000	.000	.000	.034	.004	.163	.507	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.144	-.105	.180	.017	.204	.281	.147	.599	.222	-.125	.102	-.083	-.042	.294
.002	.026	.000	.711	.000	.000	.002	.000	.000	.008	.030	.076	.370	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.178	.024	.207	.136	.159	.211	.215	.602	.237	-.001	.087	.061	.009	.356
.000	.614	.000	.004	.001	.000	.000	.000	.000	.983	.064	.198	.842	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.347	.195	.102	.218	.040	.240	.176	.593	.244	.250	.087	.021	.015	.417
.000	.000	.029	.000	.398	.000	.000	.000	.000	.000	.065	.657	.757	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.241	.024	.211	.100	.107	.192	.197	.613	.307	.047	.173	.095	.038	.387
.000	.603	.000	.033	.023	.000	.000	.000	.000	.317	.000	.043	.423	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.128	-.084	.156	.012	.107	.252	.118	.246	.498	-.040	.091	-.021	-.065	.269
.006	.074	.001	.792	.023	.000	.012	.000	.000	.400	.052	.656	.169	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.172	.050	.217	.114	.204	.332	.269	.121	.261	-.007	.123	.099	.126	.359
.000	.285	.000	.015	.000	.000	.000	.010	.000	.874	.009	.034	.007	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.177	.093	.201	.088	.208	.159	.409	.217	.187	.007	.282	-.050	-.042	.357
.000	.048	.000	.061	.000	.001	.000	.000	.000	.883	.000	.285	.378	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.209	.018	.245	.073	.211	.221	.268	.253	.257	-.023	.227	-.017	-.034	.344
.000	.706	.000	.119	.000	.000	.000	.000	.000	.624	.000	.718	.472	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.136	-.014	.293	.058	.173	.154	.175	.255	.176	-.023	.223	-.010	-.009	.286
.004	.770	.000	.218	.000	.001	.000	.000	.000	.618	.000	.828	.849	.000
453	453	453	453	453	453	453	453	453	453	453	453	453	453
.179	-.002	.209	.159	.078	.227	.196	.148	.280	-.035	.141	.004	-.011	.290
.000	.962	.000	.001	.099	.000	.000	.002	.000	.459	.003	.938	.815	.000

3.8.4 Reliability

Alike to pilot study, the reliability of the constructs in the main study was checked by Cronbach's Alpha. SPSS was used to analyze the reliability tests of the core study which are accessible in Table. The results recommend that the constructs had passable reliability, with a score ranging from .957 - .797. This means that the variables interrelated to each construct used in the planned model were positively correlated to one another.

As cohibited in the Table, the inter-item correlation and item-to-total correlation values exceeded the cut-off value for all the constructs used in the questionnaire except for social status, working environment, and supervision. However, the researcher retained these items as they will be checked again during the structural equation modeling analysis stage, this will help the researcher to understand the complete picture of the lower correlation of these two items before their deletion.

Table 3.4

Reliability Analysis

Factor	Number of Items	Cronbach Alpha	Inter-Item Correlation	Item-to-total correlation
Welfare Activities	4	.941	.797 - .901	.878 -.903
Innovation	4	.882	.778 -.971	.856 -.978
Control	4	.894	.545 -.881	.671 -.744
Outcome Orientation	4	.855	.446 -.980	.533 - .878
Level of Integration	4	.893	.654 - .681	.691 - .801
Employee Involvement	5	.913	.691 - .889	.776 - .981
Attitude of Employees	5	.942	.848 - .871	.891 - .922
Working Environment	5	.857	.758 - .778	.441 - .759
Compensation and Benefits	4	.894	.486 - .902	.581 - .798
Career Growth and Advancement	5	.963	.584 - .867	.651–911
Intrinsic Motivations	5	.801	.433 - .791	.691 - .851
Organizational Commitment	3	.957	.611 - .892	.790 - .891
Personal Satisfaction	5	.879	.770 - .854	.756 -.833
Appreciation	5	.801	.609 - .788	.623 - .794
Social Status	6	.797	.734 - .855	.496 - .888
Supervision	5	.901	.645 - .888	.456 - .923
Psychological Factors	5	.856	.635 - .821	.867 - .898
Work culture Factors	5	.811	.711 - .881	.756 - .777

3.9 FRAMEWORK OF ANALYSIS

In order to analyse the data collected from the employees working in mergers and acquisitions units, the appropriate statistical tools have been selected on the basis of objectives of the study and the validity of the data. The included statistical analysis are:

1.   Simple Percentage Analysis

2.   Descriptive Statistics

3.   Discriminant Analysis

4.   Independent Sample t-Test

5.   One-Way ANOVA

6.   Structural Equation Modeling.

3.9.1 Simple Percentage Analysis

In science, a percentage is a number or proportion that can be communicated as a small portion of 100. In the event that we need to ascertain the percent of a number, partition the number by entire and duplicate by 100. Thus, the rate implies, a section for every hundred. The word percent implies per 100.

Formula: $p = \dfrac{x \cdot 100}{y}$

3.9.2 Descriptive Statistics

Descriptive statistics can be utilized to sum up the information. In the event that the sample information is downright, attempt the frequencies or crosstabs systems. On the off chance that the sample information is scale level, attempt rundowns or descriptive.

$$\overline{X} = \frac{\sum_{i=1}^{n} X_i}{n} = \frac{X_1 + X_2 + \lambda + X_n}{n}$$

3.9.3 Discriminant Analysis

Linear discriminant function investigation (i.e., discriminant examination) plays out a multivariate trial of contrasts between gatherings. Furthermore, the discriminant

investigation is utilized to decide the base number of measurements expected to depict these distinctions.

$$Z = \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_d x_d$$

$$S(\beta) = \frac{\beta^T \mu_1 - \beta^T \mu_2}{\beta^T C \beta} \quad \textit{Score function}$$

$$\downarrow$$

$$S(\beta) = \frac{\overline{Z}_1 - \overline{Z}_2}{\text{Variance of Z within groups}}$$

3.9.4 Independent Sample t -Test

The Independent Samples t-Test analyses the methods for two independent groups to decide if there is factual proof that the related population implies are fundamentally unique. The Independent Samples t-Test is a parametric test.

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}}}$$

3.9.5 One-way ANOVA

The one-way ANOVA analyzes the methods between the groups and decides if any of those methods are genuinely altogether unique in relation to one another. In particular, it tests the invalid speculation:

$$H_0 : \mu_1 = \mu_2 = \mu_3 = \cdots = \mu_k$$

Where μ = group mean and k = number of groups. Assuming, notwithstanding, the one-way ANOVA returns a genuinely huge outcome, we acknowledge the alternative hypothesis around two groups implies that are measurably essentially unique in relation to one another.

3.9.6 Structural Equation Modeling

Structural equation modeling is a multivariate measurable examination strategy that is utilized to dissect underlying connections. This method is a mix of factor investigation and numerous relapse examinations, and it is utilized to break down the primary connection between estimated factors and inert builds.

3.9.6.1 Characterizing Individual Constructs: The initial step is to characterize the development hypothetically. Direct a pre-test to assess the thing. A corroborative trial of the estimation model is led utilizing CFA.

3.9.6.2 Fostering the General Estimation Model: The estimation model is otherwise called way examination. Way investigation is a bunch of connections among exogenous and endogenic factors. This is displayed by the utilization of an arrow. The estimation model follows the supposition of one-dimensionality. The estimation hypothesis depends on the possibility that idle builds cause the deliberate variable and that the blunder term is uncorrelated inside estimated factors. In an estimation model, an arrow is drawn from the deliberate variable to the builds.

3.9.6.3 Plan the Examination to Deliver the Observational Outcomes: In this progression, the specialist should indicate the model. The specialist should plan the investigation to limit the probability of a recognizable identification issue. Request condition and rank condition strategies are utilized to limit the recognizable identification issue.

3.9.6.4 Surveying the Estimation Model Validity: Assessing the estimation model is likewise called CFA. In CFA, a specialist thinks about the hypothetical estimation against the truth model. The consequence of the CFA should be related to the develops' validity.

3.9.6.5 Determining the Primary Model: In this progression, underlying ways are drawn between builds. In the underlying model, no arrow can enter an exogenous build. A solitary-headed bolt is utilized to address a guessed underlying connection between one build and another. This shows the circumstances and logical results relationship. Each estimated relationship utilizes one level of opportunity. The model can be recursive or non-recursive.

3.9.6.6 Inspect the Underlying Model Validity: In the last advance, a specialist looks at the primary model validity. A model is viewed as a solid match if the worth of the chi-square test is unimportant, and no less than one steady fit file (like CFI, GFI, TLI, AGFI, and so forth) and one disagreeableness of fit file (like RMR, RMSEA, SRMR, and so on) meet the foreordained measures.

3.10 PERIOD OF THE STUDY

The investigation was led for the time of a long time from 2016 to 2021. From the start, the connected examination information was assembled, and to diagram the significant survey, it had required fifteen months. By then, the pilot study considered was coordinated and changed review subject to the pre-test results had taken a few months. Third, the fundamental data was assembled for a very long time of six months. Sought after by the fundamental information through a survey, the helper information was accumulated from locales, academic books, a past research recommendation, journals, college libraries, and magazines for a period of four months. By then the assembled fundamental information was ready and the data examination work had required five months. With the all-out clarification, the entire assessment has been settled within six months.