

**THE INVESTIGATION OF THE FACTORS THAT AFFECT
JOB SATISFACTION IN THE VIETNAM IT INDUSTRY**



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Abstract

The IT industry thrives in Vietnam, resulting in a competitive labour market. Job satisfaction is crucial to retaining employees and creating a positive workplace environment in line with the digital economy's demands (Brikend, 2011). Conversely, negative sentiments among employees can lead to decreased job performance, absenteeism, and turnover, disrupting projects, creating pressure, requiring the search for replacements, and incurring costs for IT enterprises (Vijayan, 2018). This study aims to identify the factors influencing job satisfaction in Vietnam's IT industry. A questionnaire assessing job satisfaction levels was administered to 81 IT industry employees in Vietnam. The collected data were analysed using the Job Satisfaction Survey. The study employed primary quantitative research methods for data analysis. Significant factors impacting job satisfaction were identified based on the analysis and the correlation between dependent and independent variables. The data indicate that employees in the IT sector generally exhibit moderate satisfaction with their overall job and its various aspects. The study findings reveal a strong correlation between work, work environment, and company culture as independent variables and job satisfaction. Mainly, company culture was found to have a significant relationship with job satisfaction among IT industry employees in Vietnam. However, there were discrepancies in employee satisfaction across different aspects of their employment. Therefore, IT companies are recommended to improve remuneration schemes, provide better opportunities for growth and development through training programs, enhance managerial support, and foster a positive workplace culture that values diversity, inclusion, and corporate social responsibility. These measures will aid in employee retention, strengthen personnel attractiveness, and reduce costs associated with recruitment.

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Table I. List of Abbreviations

No.	Abbreviations	Definitions
1	JS	Job Satisfaction
2	JI	Job Itself
3	WE	Work Environment
4	CC	Company Culture
5	IT	Information Technology

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I. Introduction

1.1 Introduction

With the rapid development of technology and young and potential IT personnel, Vietnam is one of the significant markets providing domestic and global IT services as the 6th ranking of top countries for software outsourcing services in 2021 Kearney's Global Service Location Index (Topdev, 2022). As a result, IT enterprises compete on attractive salary ranges and benefits policies to attract talent and ensure business operations and revenue stability.

Frederick Herzberg's and Spector's theories have been extensively employed in explaining and understanding employee motivation and job satisfaction. They have been examined as relevant, specific reports and materials of Vietnam's IT business and market. They have assisted organisations in creating better policies and procedures to increase employee well-being and productivity (Alfayad and Arif, 2017). This study overviews work satisfaction ideas, components of job satisfaction generally, and the association between job satisfaction and turnover in the Vietnamese IT industry. It has been established from this study's theories and associated papers that the IT industry has economic potential for Vietnam. The significant role of job satisfaction in determining turnover and leaving intentions in Vietnam's IT industry will be explored in this chapter.

1.2 IT resource market in Vietnam and relevant studies

On the economic facet, Vietnam is in the process of economic recovery and development after two years of witnessing the enormous impact of the pandemic and applying various flexible responses. Because of this, the statutory working-age unemployment rate was 2.32 per cent in the second quarter of 2022, from 0.14 per cent in the preceding quarter and 0.30 per cent in the same period in 2021 (GeneralStatistics, 2022).

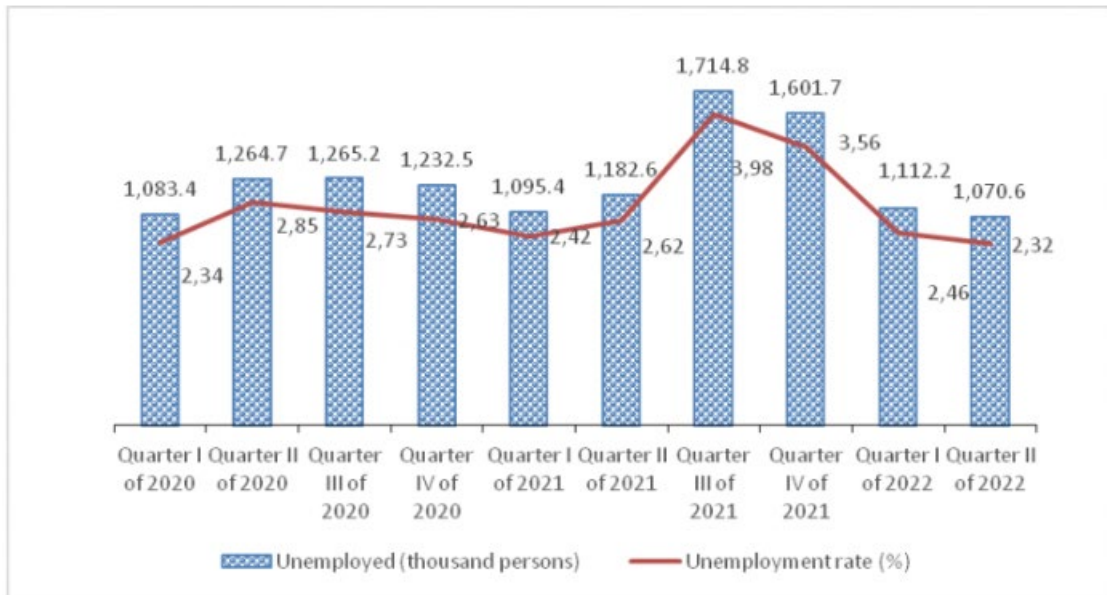


Figure 2: The quantity and percentage of statutory working-age unemployed people by quarter, 2020–2022

Source: (GeneralStatistics, 2022)

On a specific aspect, the IT industry in Vietnam is one of the four industries with the highest turnover rate and one of the industries facing a significant shortage of human resources in Vietnam, with 81% of businesses having high recruitment needs (Adecco, 2022). However, notwithstanding the high unemployment rate in the IT business, human resources have been a persistent contradiction; employee turnover is also very high (Topdev, 2022). Beginning in early 2021, this trend, called the Great Resignation or Big Quit, occurred (Topdev, 2022). According to experts, Covid-19's aftereffects will cause employees in the "super job hopping" group and the standard group to quickly experience tiredness, hesitation, and eventual decision to leave (Topdev, 2022). That makes IT talent recruitment a fierce battle between hiring new talent and retaining existing talent. The reasons for employee resignation may include dissatisfaction with jobs, work environment, company culture and trends of working from home coming from the pandemic period. On the other hand, as recently reported (Adecco, 2023), salary, good work-life balance, company culture, and career prospects significantly influence the career decisions of staff working in the Vietnam IT industry.

Top factors influence career decision



Figure 1: Main factors influencing career decisions of Vietnam employees

Source: (Adecco, 2023)

Given such data and reports, to bring economic growth and enterprises as to the prior Covid-19 pandemic period, IT enterprises must have a flexible approach to workforce management on recruitment and retention. Furthermore, a list of factors affecting workers is presented, such as wages, supervision, corporate policies, and communications to check the job's pleasant level (Herzberg et al., 1993). Therefore, it is expected that the findings of this research will give the factors affecting employee satisfaction that IT companies need to pay attention to have an overview of appropriate HR strategies and talent retention approaches.

Based on the reports on factors affecting employee career decisions in 2023 (Adecco, 2023) and aspects that can affect job satisfaction according to Herzberg's theory (Herzberg et al., 1993), the study will be based on factors relating to work itself, work environment and company culture to determine employees' expectations to gain satisfaction and give Vietnam IT companies a comprehensive insight for improving HRM strategy and policies.

1.3 Aim & Objectives of the Study and Research Questions.

Research Aim

The research aim of this study is to gain an understanding of job satisfaction and its influencing factors generally. Moreover, a complete sense of job satisfaction allows for proper control of influence and knowledge of all internal and external factors that affect job satisfaction.

Research Questions

The question that a study or research project tries to answer is called a research question. A research question often refers to an issue, and a research conclusion provides an answer based on data analysis and interpretation. This research identifies the questions as follows:

- What are factors that influence the employees' job satisfaction in the Vietnam IT industry?
- Is there a relationship between turnover intention and job satisfaction among employees in the Vietnam IT industry?

Sub-Objective: Lowering turnover rates, enhancing retention, improving salary and benefits schemes, and strengthening employee engagement are priorities in 2023 due to the economic volatility brought on by pandemics and intercontinental wars (Adecco, 2023). However, the most challenging issue facing the IT market is usually the need for qualified IT employees. There will still be a scarcity of 150,000 to 195,000 developers and engineers in Vietnam every year from 2022 to 2024, even though salaries and bonuses have risen significantly for this profession (Topdev, 2022). As demand hits 800,000 developers in 2024, the gap will widen further (Topdev, 2022). As the mainstay of the IT industry, warning about future shortages of engineers and developers is worrisome. It requires responses and attention to retention strategies, turnover rate, compensation and benefits packages, positive work environment, industry trends, appropriate training programs, other incentives, and job satisfaction measurement and evaluation for this workforce and workers in this industry in general.

IT enterprises, therefore, may have reasonable adjustments on benefits policies in case of embracing the key factors that employee is focusing on now.



Figure 3: Employees in Vietnam’s IT section (Software Industry) in 2018 – 2024

Source: (Topdev, 2022)

Research Objectives

The study’s research objectives will base on the research questions to focus on the following matters:

- To identify the primary factors impacting job satisfaction based on a review of relevant literature.
- To identify the main factors influencing employees’ job satisfaction in Vietnam’s IT industry.
- To explore the relationship between turnover intention and job satisfaction amongst employees in Vietnam’s IT industry.

1.4 Hypothesis and variables

The following hypotheses can be put forth to determine how factors related to the job, work environment, and company culture affect employees working in Vietnam's IT industry, based on the primary factors influencing satisfaction with work as recent reports in Vietnam and Frederick Herzberg's theory (Herzberg, F., Mausner, B. and Snyderman, B. B., 1993).

Hypothesis

Factors of Job Itself have a positive relationship with Job Satisfaction.

Factors of Work Environment have a positive relationship with Job Satisfaction.

Factors of Company Culture have a positive relationship with Job Satisfaction.

Variables

Factors of the Job Itself in any Vietnam IT companies.

Factors of Work Environment in any Vietnam IT companies.

Factors of Company Culture in any Vietnam IT companies.

II. Literature review

2.1. Introduction

Job satisfaction is paramount to retaining employees and succeeding in today's global economy. This study looks into factors that affect job satisfaction and how they affect turnover and plans to leave the Vietnamese IT industry. First, the study will provide an overview of job satisfaction concepts and related theories: Frederick Herzberg's Theory, the Spector Theory, and the components of job satisfaction. Frederick Herzberg's Theory and Spector's job satisfaction model attempt to explain which factors contribute to job satisfaction. While according to Spector's theory of job satisfaction, internal and external factors can impact job satisfaction, Frederick Herzberg's Theory believes that hygiene factors like remuneration, the work environment, corporate policies, and motivators, including recognition, achievements, and personal growth, affect how satisfied employees are with their jobs (Herzberg, Mausner and Snyderman, 1993; Spector, 1997). Therefore, applying the theories to job satisfaction in Vietnam's IT industry can provide essential insights into its job, work environment, company culture, and workforce dynamics. Furthermore, this part will focus on measuring job satisfaction and how job satisfaction affects retention and turnover. Finally, the IT industry's economic importance and growth potential in Vietnam are to be considered to understand the crucial role of job satisfaction based on job satisfaction factors in the Vietnamese IT industry.

2.2. The concept of job satisfaction

(Stephen and Timothy, 2014) defined that job satisfaction has a proportional relationship with the positive feeling of employees for their jobs which comes from the evaluation of many facets of work. In the general description, job satisfaction is the emotional response to various aspects of jobs (Dessler, 2019). At the same time, many researchers explored job satisfaction as having a tremendous impact and a predictor of job turnover globally and should be investigated internationally (Spector, 1997; Yousef, 2000; Benjamin, Alexander, Prashant, Osam, Hiroshi, Jie and Yue, 2021). In the words of (Brikend, 2023), the level of a person's job satisfaction indicates how much they like or detest their job. It should be emphasised that job satisfaction has been a concern for a long time in all regions and industries.

When Western culture differs from Eastern culture, national culture is also essential. Moreover, each country in the region has different personality traits and occupations. However, closer to the

topic, other ways exist to define job satisfaction focused on Eastern culture and Vietnam expressly. (Vuong, Tung, Hasanuzzaman, Quan and Giao, 2020) Indicated that job satisfaction occurs when employees can show their comprehensive talents, qualification and forte in their work in a comfortable working space and a sense of bliss with their work. Therefore, the feeling of comfort and ease from the job you are undertaking and having a particular commitment to that job is job satisfaction. Moreover, when referring to IT workers in Vietnam, job satisfaction can be characterised as the degree of fulfilment and contentment derived from one's employment. Nevertheless, regarding what causes job satisfaction, each researcher has their view and explanation through their research works.

To understand organisational behaviour in the workplace and improve employee motivation, this study will refer to two relevant theories: Frederick Herzberg's Theory and Spector's Theory.

2.2.1. Frederick Herzberg's Two-Factor Theory

It is a superb motivating idea extensively researched and debated in organisational behaviour. Herzberg proposed it in 1959, which is still relevant today (Dartey-Baah and George, 2011). This theory holds that motivation and hygiene are the two driving forces for employee motivation. When lacking, hygiene elements can cause unhappiness, while motivational factors produce satisfaction (Dartey-Baah and George, 2011). According to research, motivational elements are vital to keeping satisfaction at a basic level, while hygienic aspects are crucial to boosting motivation and satisfaction (Luljeta and Agron, 2016).

Wages, employment security, working conditions, and company policies are hygiene aspects that must be observed in the office to avoid dissatisfaction. On the other hand, motivators include chances for growth and improvement, acknowledgement, rewards, responsibility, and achievements to help employees feel motivated and satisfied at work. According to (Quan, 2020), Frederick Herzberg's theory and the job characteristics model (JCM) are two theories that can be used to explain job satisfaction in Vietnam. According to Frederick Herzberg's theory, job satisfaction and discontent are two distinct constructs influenced by hygiene factors such as pay, working conditions, and company policies, as well as motivational factors such as recognition, performance, and personal growth. (Quan, 2020) Hygiene elements such as compensation and benefits are essential for job satisfaction in the Vietnamese IT industry. However, motivators such as recognition and opportunities for personal development are crucial. Therefore, factors

affecting job satisfaction in the IT industry in Vietnam can be compared to those found in Herzberg's two-factor theory, where hygiene factors such as remuneration and work environment assist in reducing frustration. In contrast, motivational factors such as career development and opportunities for recognition contribute to higher workplace satisfaction, speed, and motivation.

According to Herzberg, these two sets of criteria are independent. Therefore, concentrating only on hygienic considerations will not result in higher motivation (Dartey-Baah and George, 2011). Instead, he stated that an employer must focus on both aspects to encourage employees properly. Thus, Frederick Herzberg's theory offers a comprehensive framework for comprehending employee motivation and can assist companies in creating practical plans for retaining their personnel (Dartey-Baah and George, 2011). In addition, companies must have a solid understanding of the variables that influence job satisfaction to create a satisfying workplace that increases employee well-being and productivity (Tanjeen, 2013). Therefore, Frederick Herzberg's theory can comprehensively explain the variables affecting job satisfaction in the IT industry in Vietnam.

This theory has continued to be relevant in contemporary organisations, offering insight into employee retention and motivation. Furthermore, organisations can foster a positive work environment by encouraging motivation and job satisfaction. However, Frederick Herzberg's two-factor theory also emphasises the need for job abundance and the availability of motivating factors at work (Herzberg *et al.*, 1993). Therefore, the author considers this theory and addresses numerous aspects that might affect employee satisfaction to study the factors that can affect employee satisfaction and find methods to improve job satisfaction in the Vietnam IT industry.

2.2.2. Spector Theory

Spector's Theory of work satisfaction is a thorough method of comprehending why people are content or unsatisfied with their jobs (Spector, 1997). This theory considers both internal and environmental elements that affect job satisfaction. Internally, the theory investigates the relationship between task diversity, autonomy, career opportunities, and job satisfaction. In addition, the elements, including compensation, chances for progression, and relationships with coworkers, are considered factors outside the workplace. According to the Spector Theory, a person tends to be satisfied with their job when the demands and requirements of their position align with their values and desires (Spector, 1997). On the other hand, a person may experience

job discontent if there is a mismatch between the requirements of the job, outside influences, and their values and needs. The Spector Theory of job satisfaction is a valuable tool for employers and employees in determining how job characteristics, values, and conditions affect employee satisfaction (Laurent, Paul, Tammy, Steven, Cary, Michael, Juan, Paula and Ulla, 2008).

Spector's job satisfaction theory dates back to 1997, and there are many ideas and beliefs of the author at the time that are not recognised and verified, such as the relationship between job satisfaction and physical health symptoms, 9-facet Job Satisfaction Survey (JSS) (Spector, 2023). Therefore, the book *Job Satisfaction: From Assessment to Intervention in 2022* has updated old topics, developed new topics, and analysed JSS (Spector, 2022). Therefore, Spector's job satisfaction theory can be widely used in different fields and is recent in practice. In addition, such a model proposes that intrinsic and extrinsic elements might affect a person's overall job satisfaction. Intrinsic job factors include the work's nature, the challenge level, and the required skill. On the other hand, outside variables pertain to the job environment, including coworker support, autonomy, power to make decisions, and the degree to which employees feel their work is recognised and appreciated (Steven and Robert, 2005). It has been discovered that various outside influences affect job satisfaction in Vietnam's IT sector. Salary is among the most critical variables, with employees undergoing insufficient pay as the main reason for dissatisfaction, as a recent report (Adecco, 2022). Availability of training and development opportunities, supervisory standards, and overall company culture are other external factors that can influence job satisfaction. Therefore, such significant factors also significantly affect job satisfaction in Vietnam's IT industry. Furthermore, employees with much autonomy and decision-making power tend to show higher job satisfaction. At the same time, employees given challenging tasks to prove their abilities tend to be happier at work. Thus, understanding the factors influencing job satisfaction creates a more conducive and motivating work environment.

Since its introduction, businesses and organisations have widely accepted Spector's Theory of Human Resource Management (HRM). HRM often puts the organisation's demands and ambitions ahead of each employee. Therefore, organisations must consider their and employees' needs to create an effective HRM system. This system should maximise employee engagement, job satisfaction, and performance while decreasing turnover and other employee dissatisfaction issues. Spector's Theory has far-reaching implications for businesses and organisations, impacting various organisational goals. Organisations, for example, can improve employee

productivity, reduce turnover, and foster a more harmonious workplace by implementing HRM practices tailored to their specific needs. Thanks to the mentioned benefits, Spector theory is an excellent idea and reference for IT businesses and authors to refer to, apply human resource management, find out the factors affecting job satisfaction and find solutions to improve personnel quality.

According to Spector's theory, job satisfaction is critical to organisational effectiveness and employee engagement. It has compelled organisations to prioritise their employees' needs and desires and create an environment that meets them. In addition, companies that value highly on job satisfaction are more likely to generate higher employee engagement and better performance, which could lead to increased profits.

In conclusion, Spector's theory provides a valuable framework for understanding factors affecting job satisfaction in the IT industry in Vietnam. Employers can then pinpoint areas for development and take action to raise employee satisfaction and engagement, putting equal emphasis on internal and external factors. Companies can create an effective workplace by understanding and addressing these factors to boost employee engagement, productivity, and overall satisfaction.

2.3. Components of job satisfaction

Many factors, including job remuneration, relationships with coworkers, and opportunities for advancement, can affect job satisfaction. It is a multifaceted construct influenced by many variables, including work environment, job security, pay, company culture, and career advancement opportunities (Spector, 2022). Some scholars believe indicators that impact job satisfaction include external and internal factors. For example, according to (Laurence and Roman, 2018), intrinsic factors include a sense of meaning and competence in the workplace, an understanding of the organisation, and power and shared decision-making. In addition, a supportive work environment, compensation, and benefits or company culture are extrinsic factors contributing to job satisfaction (Laurence and Roman, 2018). The same view on external and internal factors affecting job satisfaction (Quan, 2020) also believes that demographics contribute to job satisfaction, including gender, qualification, and age (Kuo and Chen, 2004). Furthermore, intrinsic factors had a positive relationship with job satisfaction more than extrinsic

factors' contribution, as a few surveys prove the minor importance of remuneration with the well-being of employees (Rowland and Hall, 2013).

To keep a motivated and effective workforce, businesses must prioritise the elements that affect job satisfaction, which is a crucial component of the IT workplace in Vietnam. For example, (Khuong and Yen, 2016) assert that professional development prospects, pay, and job security affect job satisfaction in all sectors of Vietnam. At the same time, business factors such as mission, involvement, consistency, adaptability, and well-being positively impact work improvement, improving the work performance of IT staff in Vietnam (Nguyen, Siengthai, Swierczek and Bamel, 2019). Furthermore, according to the authors, the possibility of career growth is a significant motivator for employees in Vietnam's IT industry, and businesses that offer opportunities for training and development are more likely to keep their staff members. In addition, pay is essential to job satisfaction since it enables workers to meet their financial commitments and raises their living levels. Furthermore, (Nguyen *et al.*, 2019) point out that highly trained IT workers in Vietnam expect a competitive wage. In conclusion, (Khuong and Yen, 2016) study offers insightful information about the elements that affect work satisfaction in Vietnam's IT industry. Therefore, businesses prioritising salary and career development possibilities are likelier to keep their essential IT staff.

Moreover, company culture and work environment are vital for job satisfaction's contribution to the Vietnam IT industry. Higher job satisfaction is more common among workers who believe their employer respects and values their contributions. The study by (Benjamin *et al.*, 2021) highlights the significance of several factors, including job security, job autonomy, remuneration and benefits, work-life balance, and company culture, in determining job satisfaction in the IT business. On the other hand, the workplace environment significantly influences employee happiness. Therefore, the work environment dramatically impacts job satisfaction (Raziq, A., and Maulabakhsh, R., 2015). The authors discovered that a supportive work environment, which includes positive interactions with coworkers, commendation and feedback from superiors, and a solid work-life balance, might result in greater job satisfaction. Conversely, a lousy work environment, ineffective communication, lack of leadership support, and high-stress workplaces can lower job satisfaction. Additionally, the organisational culture in the Vietnam IT sector strongly predicts job satisfaction and organisational commitment (Nguyen *et al.*, 2019). This

emphasises the significance of developing a supportive workplace culture that encourages employee loyalty and pleasure.

In conclusion, some factors, such as income and benefits, job security, possibilities for career progression, company culture, and conducive working conditions, influence job satisfaction in Vietnam's IT industry. Therefore, to ensure the job happiness of their IT personnel, employers in Vietnam must prioritise and acknowledge the significance of these variables. By doing this, companies may establish a productive workplace, offering competitive salaries, providing career growth and development opportunities, and a distinctive company culture promoting employee loyalty, motivation, and job satisfaction, increasing output and boosting economic success.

2.4. Measuring job satisfaction

Job satisfaction is integral to any business because it directly affects employee productivity, dedication, and retention. Therefore, accurate measurement of job satisfaction is essential as companies constantly strive to improve it. According to (Thomas, Eric, Mark, Julia, Donald, Martha, Mark, William, Judith, Elnora, and Jeff, 1999), there are various methods, such as surveys, interviews, and focus groups, to gauge job happiness. Depending on the object and purpose of the study, scholars have different methods of measuring job satisfaction. The most popular methods are surveys because they are easy to conduct and have large sample sizes (Steven and Robert, 2005). In addition, they can be standard or tailored to the requirements of a particular company. However, the questionnaires or surveys cannot deeply analyse the unclear and qualitative factors of the participants' answers. They cannot make a comprehensive assessment because they may miss some aspects of the measured object. Another technique for measuring well-being at work is interviewing, which can provide a deeper understanding of employee perspectives (Carvajal-Arango, Vásquez-Hernández, and Botero-Botero, 2021). At the same time, interviews can be conducted with many people with different characteristics and experiences, which allows the researcher to gather information from diverse sources and to be able to compare different views and opinions. However, they can be time-consuming and require researchers with expertise in analysing and interpreting data. The best way to organise it will depend on its needs and available resources as each method has advantages and disadvantages.

Regarding the most commonly used self-report questionnaire, two approaches can be applied: global and sophisticated facet measures with advantages (Stephen and Timothy, 2014), (Steven

and Robert, 2005). With the first method, the respondents need to focus on their overall feeling about the job, and scholars can use its data for further research and prediction (Stephen and Timothy, 2014). Seven options are on a 7-point scale ranging from unsatisfied (1) to extremely satisfied (7) for the respondent's choice. On the other hand, the facet measures concentrate on the specific criteria of satisfaction to diagnose the upwards and downwards of the individual and organisation. For example, Werner (2001) states job satisfaction encompasses work, supervisory co-worker relationships, and income opportunities.

From there, researchers can select suitable questionnaires for each industry, research object to choose global measures or develop and investigate many criteria to appropriately assess job satisfaction of such industry and object.

2.5. Job satisfaction and retention and intention to leave.

Organisations are increasingly interested in the relationship between job satisfaction and turnover or intention to leave. Researchers have proven that job satisfaction is essential for understanding employee turnover or the choice to leave (Korunka, Hoonakker, & Carayon, 2008; Muhammad, Suleman, Orangzab, Basharat and Wasif, 2018). Therefore, organisations can work to improve employee satisfaction and engagement by understanding how job satisfaction affects these aspects. In addition, such implementations will ensure their long-term success and the success of their employees.

(Muhammad *et al.*, 2018) They looked into how job satisfaction impact on employee turnover. The researchers gathered information from various organisations in Pakistan and used a questionnaire to assess job satisfaction. The study demonstrates a favourable correlation between job satisfaction and employee turnover. Employees with higher job satisfaction are more likely to stay with the company and their position for a long time, while those with low job satisfaction are more likely to leave more often. On the other hand, the correlation between job satisfaction and intention to leave has drawn significant attention because it is an essential factor in predicting and managing employee turnover (Seston, Hassell, Ferguson and Hann, 2009). According to research, job satisfaction indicates the intention to leave (Seston *et al.*, 2009). In addition, job satisfaction is often tested through employees' overall attitudes towards their jobs, including their satisfaction with job security, salary, benefits, promotion opportunities and the quality of the working environment (Seston *et al.*, 2009). According to studies, employees are

more likely to stay at work when satisfied with their work; conversely, employees who are unsatisfied with their jobs are more likely to leave (Seston et al., 2009).

Job satisfaction significantly impacts an employee's decision to continue working for a company. According to (Kalyanamitra, Saengchai, and Jermsttiparsert, 2020), job satisfaction can be increased and sustained by implementing effective retention strategies. Job satisfaction is essential for organisations because it can lead to higher organisational commitment and loyalty, improved job performance, and lower turnover rates. Thus, job satisfaction directly impacts employee turnover, and organisations should ensure employees are content with their positions and relevant factors. In addition, job satisfaction also significantly affects an employee's plan to leave, and employers should ensure that their staff members are content with their overall jobs to reduce the likelihood of turnover.

The high turnover percentage of IT employees remains a significant issue in the Vietnam IT industry, although it has proliferated recently (Adecco, 2022). According to (Ninh, 2014), the most common causes of high turnover in the Vietnam IT industry are a lack of job satisfaction, insufficient compensation and benefits, and limited career development. Job satisfaction is the most vital factor for IT employees, as a lack of it can reduce employee motivation and lead to a high turnover rate. In addition, IT staff who are satisfied with their jobs will be motivated and more inclined to seek career development opportunities, such as training and promotion. Similarly, low pay and benefits can lead to high turnover in the IT industry, as employees may be dissatisfied with their income and help if they are not competitive. Furthermore, a lack of career development opportunities may discourage employees from remaining in the industry if they do not believe they can advance. These factors are inextricably linked, and they all contribute to a high turnover rate in the Vietnam IT industry, as they can lead to job dissatisfaction.

The turnover rate in Vietnam is high in some industries, such as F&B, IT and creates pressure on businesses that need workers and skilled workers. According to (Han, 2023), some enterprises in Vietnam have suffered due to the high turnover rate. This may have led to decreased product and service quality, increased dissatisfaction, and reduced employee morale and productivity of stayed employees. Furthermore, it has increased labour and production costs, resulting in lower profits. Moreover, it has resulted in a decrease in investment in the sectors, further impeding its

development. In addition, the high turnover rate in the Vietnam IT industry is causing many issues that will worsen if not addressed. Therefore, improving job satisfaction is an issue that needs to be focused on in terms of retaining talent and reducing turnover.

2.6. The Importance of the IT Industry for Vietnam's Economy

The Vietnamese IT industry has grown significantly in recent years, contributing to its economy. For practical purposes, Vietnam's IT industry has been central to many discussions in recent years. According to the research paper by (Anh and Thang, 2007), this industry has significantly contributed to the national economy. The Vietnam IT industry comprises private and public companies, with the latter dominating the market. This expansion has benefited the country's economy in a variety of ways. The IT industry has played an essential role in creating jobs and income opportunities for the country's population. It has also boosted the country's global competitiveness and drawn more foreign investment. Furthermore, by providing more efficient and cost-effective services, the industry has improved people's quality of life. This has benefited various industries, including health care, education, and banking. Overall, the IT industry has significantly contributed to the Vietnamese economy, which should be recognised (Fredric and Ha, 2003)

Furthermore, Vietnam's IT industry has positively impacted GDP growth when it has grown steadily over the last few years. Moreover, the IT industry has enabled Vietnam to become more competitive globally by allowing it to develop and employ advanced technology. As a result, Vietnam has become a more attractive destination for foreign investment, creating more opportunities for individuals and businesses internally. Overall, the Vietnam economy and labour market have benefited from the IT sector's rapid growth, and the nation continues to reap its benefits.

Therefore, the importance of job satisfaction and investigating the factors of job satisfaction is paramount in Vietnam's IT industry because of its essential contribution to the domestic economy and the desire for digital transformation, and the increase in the proportion of high-tech industry in Vietnam's market.

2.7. Literature Gap

The study's basis is the factor analysis, focusing on the main factors for job satisfaction in the Vietnam IT industry. The literature reviews, and articles on this topic are limited, especially

needing more documents on Eastern culture and staff in Vietnam's IT industry. (Benjamin *et al.*, 2021) Argues that most job satisfaction studies on IT workers have been carried out in North America or Western Europe and among specific populations – WEIR stands for “Western, Educated, Industrialized, Rich, and Democratic” (Henrich, S. J, Heine, J. and Norenzayan. A., 2016) while the majority of people are not WEIR with an estimate of 88% of the overall population. Moreover, (Benjamin *et al.*, 2021) indicate that various characteristics, tendencies, and behaviours exist in other regions of the world. In reality, Vietnamese have high levels of collectivism, high power distance, and moderate uncertainty avoidance but differ from Westerners in their approaches to reasoning, action, and values (Quan, 2020; Hofstede, 2001). It comes from the influence and colonies for the long-time by China, France and America in Vietnam's history. As such, organisational structures exhibit close vertical coordination with a strong emphasis on face culture, social pressure, and conformity, all of which tend to be associated with Vietnam employee job satisfaction (Quang, T. and Vuong, N.T., 2002). On the other hand, knowledge workers' definition is broader than those employed in the IT sector. Despite their significance, these findings are not to mention the study target. Therefore, models that can be generalised across geographic contexts and are tailored to explain behaviour across cultures will be beneficial and practical for this study.

By using the deductive research approach and statistical analysis in the quantitative strategy for a sample of employees in Vietnam's IT section, this study expects to be able to answer the research question about the factors affecting the job satisfaction of IT staff in Vietnam. Furthermore, it can contribute to boosting the importance of job satisfaction in the IT industry in Vietnam.

2.8. Summary

The research report is based on analysing relevant theories, components of job satisfaction, practical and usual measurements of job satisfaction, the correlation between job satisfaction and turnover and intention to leave for Vietnam IT employees and the significant growth of the IT industry in Vietnam. The considerable contribution of the IT industry to the Vietnam economy must be recognised, and the served shortage of qualified talent requires IT enterprises to have flexible and appropriate policies to appeal to and retain the skills and satisfy such potential of the IT industry for the general economy. From the internal and external factors influencing

employees' job satisfaction in the IT industry, as the Spector theory and hygiene and motivations aspects of Frederick Herzberg's theory, elements relating to the job, work environment, and company culture have a positive relationship with job satisfaction.

III. Research Methodology

3.1. Introduction

The study of research methodologies can be summed up as "methodology". The methodology is a methodical and theoretical assessment of the approaches for solving issues or researching used in each field of research. A framework for conducting research, interpreting data, and coming to conclusions is provided by methodology. It covers a project or research investigation's methods, equipment, and processes. This study has been thoroughly explained as a deductive research strategy in the research methodology, and its research design has been highlighted as a strength. The advantages and disadvantages of this study have also been discussed by analysing each research approach and technique in this chapter.

3.2. Philosophy

During this research effort, positivism served as the guiding research philosophy. According to Ponterotto (2005), positivism is the process through which hypotheses that are claimed to be quantified are verified and where functional correlations between explanatory and casual elements (independent variables) and results can be derived (dependent variables). This study used quantitative research methods to analyse the factors affecting job satisfaction (job itself, work environment, and company culture) in the Vietnam IT business and verify the correlation between such independent variables and overall job satisfaction as dependent variables. Positivism was chosen because the offered hypotheses were accepted or rejected based on the results.

According to the author, there are 5 common philosophies: critical realism, postmodernism, interpretivism, pragmatism, and positivism (Saunders, Lewis and Thornhill, 2009). Other philosophies have also been considered before conducting this study, but because the disadvantages of each philosophy are different, it is not suitable for this study. For instance, critical realism can be complex, with reductionism and lack of practical guidance, while interpretivism can be subjectivity and bias, generalizability, and interpretation variability (Saunders *et al.*, 2009). Similarly, postmodernism has limitations when relativism and skepticism, fragmentation and incoherence, and disregard for empirical evidence, and pragmatism has limitations when short-term focus, lack of ethical guidance, the instrumentalisation of knowledge, lack of normative guidance, and potential for exploitation

(Saunders *et al.*, 2009). Therefore, positivism was applied to this study because of its ability to demonstrate hypotheses through results and avoid the limitations of other philosophies.

3.3. Research Approach

The term research approach refers to a researcher's methodological framework and strategy to conduct the study using various techniques, including collecting and analysing numerical data to evaluate hypotheses and measure variables; and statistical methods to examine the data. Generally, the research methodologies have been described in three categories: deductive, inductive, and abductive (Mullen, Malone, Denney and Santa Dietz, 2018). This study would be characterised by the deductive approach of research concerned with developing hypotheses. Such hypotheses have been based on the existing theory. The deductive method includes formulating hypotheses based on already-existing theories or models in a methodical and structured manner. Therefore, it may help gather and analyse data for this research. The deductive approach is an appropriate research strategy for studying the variables affecting employees' job satisfaction in the Vietnam IT industry. This study attempts to provide a general introduction to the deductive approach, describe the variables affecting job satisfaction in the IT industry in Vietnam, and explain how the deductive approach was used to study these variables. By looking at these supporting points, we can better understand how the deductive approach can be used to examine factors affecting job satisfaction in Vietnam's IT industry. This method identifies variables that influence job satisfaction, and hypotheses that may be tested through empirical research are then developed. This strategy, or the top-down strategy, begins with a general theory before moving on to more particular observations and conclusions. Before continuing with the deductive method for this project, alternative approaches are also considered. However, the key restrictions cannot be applied to this project due to the drawbacks of the inductive and abductive methodologies. While the abductive approach is limited to conjectural conclusions, lack of verifiability, and potentially inadequate data interpretation, the inductive approach has constraints on generalisation, potential bias, and lack of predictability (Palfai and Salovey, 1993; Kovács and Spens, 2005).

Conducting specific justifications for general justifications is the primary goal of this sort of research methodology. Moreover, hypotheses formed from prepositions of the theory have been used to define deductive approaches (Vaamonde, Omar and Salessi, 2018). On the other hand,

the deductive method now includes the deductive conclusion that aligns with the premises or prepositions. The deductive technique falls under the domain of research methodology and has been used to explain how ideas and variables are related in a casual way that makes sense. It has also been used to quantitatively measure ideas that may be employed in data collection and analysis (Frew, Weston, Reynolds and Gurr, 2018). In quantitative research, numerical data that can be statistically analysed are gathered. This method is suitable for studying large populations and discovering patterns and relationships between variables. The deductive method would make it easier for the researcher to conduct a scientific examination of the employee's level of job satisfaction. Also, the researcher could observe the cause of low job satisfaction and interpret the findings more effectively.

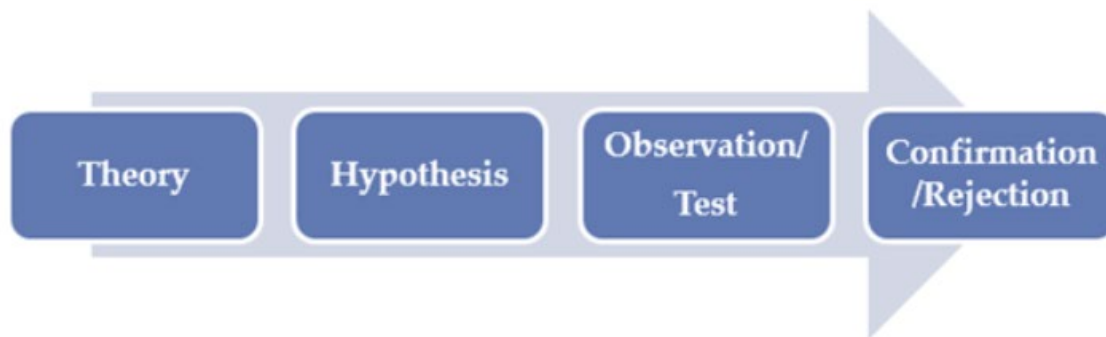


Figure 4: Inductive approach

Source: (BusinessResearchMethod, 2023)

3.4. Research design

Some reasons influenced the author's decision to use this design for this study. A quantitative research strategy is better appropriate for this study due to the amount of numerical data needed, the availability of end-result verification, and the research questions. Qualitative studies were excluded because the author's responses required a larger sample. (Malhotra, 2009) argues that a small number of non-representative samples is essential to qualitative research. For such a research style, analyse unstructured data in a non-statistical way to gain a deeper understanding.

Quantitative data, on the other hand, are subjected to statistical analysis after distribution to a broader interest group. After then, final recommendations are made for future actions and research. Therefore, a quantitative research design has been considered in this study to establish

the research and acquire data on the research issue. With the help of this research design, the study could be conducted more precisely, and its data on the variables collected more successfully. Furthermore, the study approach enables the researcher to examine the data and identify trends systematically.

The mixed-methods strategy using questionnaires and interviews is considered for fully understanding the topic. Furthermore, this approach can provide meaningful data on the opinions and experiences of participants, together with a more detailed understanding of trends and patterns in the data. However, the mixed methods technique may require more time, money, and specialised knowledge than this study has available.



Figure 5: Research design in quantitative research

Resource: (QuestionPro, 2023)

3.5. Sampling technique

When examining job satisfaction in the Vietnam IT sector, obtaining information from a representative sample of people is crucial. The questionnaire has contributed to 100 employees working in the IT industry in Vietnam who are also employees of many different types of companies, such as local companies and global brands. This study used simple random sampling techniques. First, an initial list was made with the equivalent of 200 people who met the survey's criteria, and then assign a sequential number to each individual. And with an intended sample size of 100, this study used a random number generator to select the sample size of 100 people. 100 people constitute the research sample for this study, and the questionnaire consists of two

main sections: demographics and five options scale. It is necessary to overstate the importance of demographic information in examining job satisfaction, as it provides insight into the many variables that influence it. In addition, developing reliable and accurate job satisfaction scales is essential to ensure that the study results are accurate and reliable. Therefore, this study aims to understand better how companies can increase employee satisfaction and retention rates in this growing industry by evaluating the elements influencing job satisfaction in the Vietnamese IT industry.

Each sampling technique has its advantages and disadvantages. Still, this study used simple random sampling to maximise cost, save time, and ensure unbiased information (Creswell, 2014) even though the author has considered other methods. For example, cluster and systematic sampling have drawbacks in the potential for bias, and stratified sampling has limited high sampling costs.

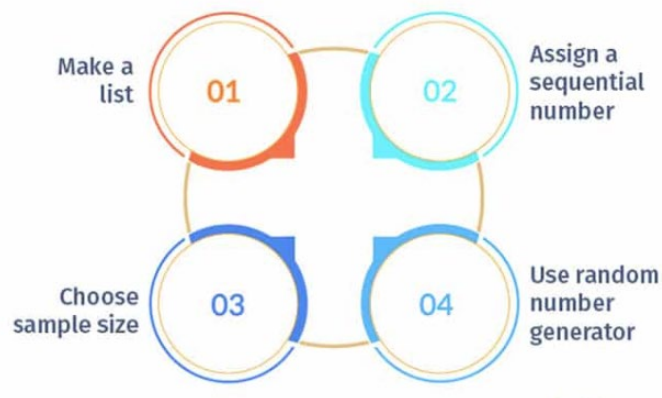


Figure 6: Simple random sampling

Resource: (QuestionPro, 2023)

3.6. Data collection and analysis

Data collection and analysis is an essential component of any research. Simple random sampling was applied to this project to select 100 participants from the pool of 200 contacts in social networks and phone contacts based on the authors' previous experience in the Vietnam IT industry. The demographic requirement of this study on all genders, regardless of age and working experience in Vietnam's IT industry, participated in this study to make simple random sampling more convenient. The survey will be distributed online using Google Forms to the 100 employees working in Vietnam's IT section of companies with various business types and

organisational structures, such as outsourcing companies, product companies, start-up companies, and global brands in Vietnam, to reach a wider participant via email on mobile devices and laptops.

This study used survey methods to collect data on independent and dependent variables using a pre-designed questionnaire. Moreover, the questionnaire is designed based on the mentioned theories, including Frederick Herzberg's Theory and especially Spector's Theory, the intrinsic and extrinsic elements affecting job satisfaction. In which the job satisfaction survey (JSS) of Spector Theory is widely applied. JSS is a 36-item scale with nine aspects Payroll, Promotion, Supervision, Side Benefits, Random Rewards (performance-based rewards), and Operational Processes (commissioning rules and procedures). required), Colleagues, Nature of Work, and Communication to assess employee attitudes about work and its aspects (Spector, 1997). This study designed questionnaires based on 9 facets of JSS with 22 multiple choice questions from 1-5 representing from very dissatisfied to very satisfied to suit the project topic and Vietnam context. Detailing the individual evaluation criteria under internal and external factors and sticking to independent variables helps the questionnaire to present complete problems and avoid omitting material criteria. All participants must be fluent in English to get the best result of understanding, answer thinking, and be transparent with language. Qualified candidates for this study will be selected, contacted, and asked to complete a survey using quantitative research. The study also analysed the participants' socio-economic background using the demographic part. This method has been shown to have a higher level of normalisation, allowing easy comparison of results (Sileyew, 2019). All candidates participating in the form could answer 30 questions to ensure the confidentiality of their answers.

The author considered other data-gathering methods during the research development phase, including focus groups, one-on-one interviews, and "field" observations. However, these techniques have been dropped because of feedback bias and low response rates compared to surveys.

The data analysis method is essential for a research study. Logical and statistical techniques are used systematically in this process to condense the data: detailed descriptions, illustrations, recaps, and evaluations. It would make it easier to demonstrate the frequencies and relationships between the variables that could be discovered. The statistical analysis examines correlation,

validity, normality, and reliability. The normality test will be performed to investigate the data distribution.

The data analysis process considered in this research is a statistical analysis using statistical software. It is used to analyse the data correctly. SPSS software can be used to obtain and evaluate survey data on factors affecting job satisfaction in the IT sector in Vietnam. For example, a questionnaire could be designed and administered to a sample of employees working in Vietnam's IT industry to collect data for this research project. Survey questions can be set up to collect information on various variables, including job factors, work conditions and company culture. The resulting data can then be analysed using SPSS software. SPSS software is a powerful tool for analysing large data sets. It provides several statistical tests and tools to identify patterns and relationships between variables. The data acquired for this research study can be analysed using descriptive statistics like mean, median, and deviation to understand the data thoroughly. In addition, inferential analysis might be employed to ascertain the relationship between elements like pay and job satisfaction. Moreover, quantitative methods often support or reject formulated hypotheses by finding relevant evidence (MacInnes, 2020). The process of quantitative analysis requires a critical analysis of the numerical results, which must then be compared with other results relevant to the study.

Furthermore, data on influencing factors such as the job, work environment, and company culture will be analysed to determine employee job satisfaction in IT. Finally, combining data collection, quantitative research methods, and SPSS software can help provide accurate and reliable data analysis for research projects.

3.7. Research Ethics

Ethical considerations in research are crucial because they protect the rights and well-being of participants. Therefore, the importance of ethical considerations in research must be considered. Furthermore, ethics is an essential part of research because it forms the foundation of scientific research. Therefore, researchers must adhere to a code of ethics to ensure that research is conducted fairly, objectively and with dignity.

(Guthrie, 2010) outlines the authors' ethical responsibilities to participants, which include that it is forbidden to damage or mislead study participants, especially regarding their moral and legal obligations. Participation must be open and informed, and data must be kept private. Thus, all

participants must give informed consent, an essential ethical consideration. Before respondents can participate in a study, they must provide an informed agreement in the consent form as Appendix 2. Participants must consent after fully understanding the research project's risks, benefits, and purpose. In addition, ethical considerations ensure that research is conducted fairly and objectively. Researchers must avoid conflicts of interest that could compromise the study's objectivity. In addition, maintaining public trust in science depends on ethical issues. Unethically conducted research can lead to a loss of public trust in them, which can have severe consequences for the scientific community. This study's participants' names remain anonymous, and their private data will be protected. Members' privacy must be covered by removing or anonymising any identifying information. The authors ensured that no personal information was collected and protected the participants' anonymity by informing them of this responsibility at the beginning of the study. All participants agree to answer the questions voluntarily, and respondents can withdraw at any time.

3.8. Summary

The study uses quantitative data collection methods to collect information accurately and consistently, reduce the potential for bias and error, and provide insight into the variables that influence job satisfaction in the IT industry in Vietnam. In addition, it is easier to accurately assess and quantify responses using multiple-choice questions because the answers they provide are structured and defined. Primary quantitative data collection methods are often easier to perform and analyse than other methods. Closed questions are straightforward to answer and take less time to complete. Furthermore, by comparing the quantitative data across groups and time, the authors can quickly notice trends and patterns in job satisfaction scores in the IT industry in Vietnam. It can provide insight into the changing needs and challenges facing the industry. By comparing the quantitative data across groups and time, the authors can quickly notice trends and patterns in job satisfaction scores in the IT industry in Vietnam. It can provide insight into the changing needs and challenges facing the industry.

Random sampling was utilised in this study to ensure that the sample set could accurately reflect the larger population, which increased the validity and generalizability of the outcomes. This is especially important in a large industry like Vietnam's IT industry, where several factors can influence job satisfaction. Additionally, the study has received ethical approval to protect

participant rights and privacy during research. Further, it ensures that moral principles are upheld, including obtaining informed consent and maintaining confidentiality.

IV. Findings and Analysis

4.1. Introduction

Since the primary quantitative research method was used to perform the entire study, relevant data were gathered using questionnaires. This chapter will evaluate and calculate all acquired data using SPSS software. Also, all these statistics are calculated to identify the key variables affecting job satisfaction for IT workers.

The key findings in the chapter show that all variables of the job itself, work environment and company culture correlate with job satisfaction for personnel employed in the Vietnam IT industry. Of all such correlations between critical variables and job satisfaction, company culture shows the strongest correlation with job satisfaction for employees working in the IT industry in Vietnam. Demographic analysis shows that male participants in this study predominate, the age group 18-29 participates the most and the education level of most participants in the survey is university. Although according to the research results, employees generally show satisfaction with the overall job, aspects of salary and benefits, promotion opportunities, recognition and rewards, training and development, workload, management support, and corporate social responsibility should be improved.

4.2. Response rate

Given the number of those connected to the research data collection process, it is the percentage of a researcher's population. Determination of research respondents is essential as it provides a check on the relevance of the study. However, sometimes the number of respondents is reduced due to consistency in communication and interest in the research data collection process. This study developed an 81% response rate out of the 100 population of this study. This implies that the collection and analysis of research data have positively affected acquiring conclusions.

4.3. Demographic analysis (gender, education and age)

Demographic metrics are essential in research because they allow researchers to assess differences and correlations between population variables and characteristics. Researchers consider gender and age as variables in their study to ensure that they can identify potential differences and disparities in subject outcomes between different sexes and age groups and develop effective interventions and treatments for diverse populations. Education level is

essential in research on job satisfaction in the IT industry in Vietnam. Because employees with low education may feel disadvantaged and lack confidence when working in a dynamic IT environment that requires high expertise. According to a study by (Vila and García-Mora, 2005), those with more outstanding education tend to have better levels of job satisfaction. (Quan, 2020) believes that external and internal factors and demographics, including gender, education and age are the leading indicators that can influence job satisfaction. Therefore, gender data is a critical factor in this study and contributes much to a deeper understanding of the research subjects.

On the other hand, work experience duration is an essential variable affecting job satisfaction (Wahyudi, 2018). Employees who have worked longer tend to be more satisfied with their jobs than new ones because experienced employees have adapted to the workplace, established relationships with colleagues and mastered their job roles, leading to higher job satisfaction. Conversely, new employees may face challenges adjusting to the working environment, affecting their job satisfaction. Therefore, length of work experience is an essential factor that should be considered in research on job satisfaction to understand the dynamics of job satisfaction and the ability to retain employees long-term in the organisation.

Table III. Demographic features

Demographic variables	Number	Percentage (%)
<i>Gender</i>		
Male	45	55.6
Female	33	40.7
Other	3	3.7
<i>Age</i>		
18-29	47	58.0
30-39	31	38.3
40-49	3	3.7
<i>Educational level</i>		
Primary school	0	0
Secondary/ High school	3	3.7
Undergraduate	44	54.3
Postgraduate education	34	42.0

<i>Year of experience</i>		
Less than one year	8	9.9
1 – less than 5 years	42	51.9
5 – less than 10 years	21	25.9
10 – less than 15 years	8	9.9
15 – less than 20 years	0	0
20 – 25 years	2	2.5

Source: (self-created)

The table above shows the demographic data of participants, including their gender, age, education level, and years of experience of them. There are 81 respondents participated in this research. Male participation in this study was more predominant than that of females and the other gender, with proportions of 55.6, 40.7 and 3.7, respectively. The age group 18-29 participated the most among the study participants, from 18 to 49 years old (47%). The percentage of the age of 30 – 39 and 40 – 49 account for 38.3 and 3.7, respectively. The educational level of most respondents in the study is an undergraduate degree (54.3%). The participants' postgraduate education accounted for 34%. The remaining 3.7% of participants have secondary/high school degrees. Finally, working experience from 1 year to less than 5 years accounts for the majority (51.9 %) of the experience of most participants.

The IT industry is vast in scope, and workers in this industry can include many different positions and departments, including engineering and business. But the proportion of men still accounts for a high proportion because the related division to engineering and technology still accounts for the highest number of employees. Therefore, the high percentage of men in this study can be explained by the male gender dominant in the STEM (Science, Technology, Engineering, and Mathematics) field (Kitada, M., and Harada, J., 2019). (Bolton, 1980) suggested that women are often overlooked for IT professions due to cultural biases that men are better suited for technical responsibilities. On the other hand, social prejudices are prejudices and discriminatory behaviours deeply ingrained in society and can lead to unequal treatment and opportunities for some individuals (Shuili D., Bhattacharya, C. B. and Sankar, S., 2015). These social biases and cultural expectations can affect an individual's career trajectory and limit their opportunities for advancement. For example, women often face career advancement barriers due

to societal stereotypes, such as the belief that women are less competent than men. Therefore, the IT industry in Vietnam is still dominated by men due to cultural norms, gender stereotypes and a lack of female role models despite efforts to promote diversity and get on well.

These findings show the influence of demographic factors on job satisfaction for employees in Vietnam's IT industry. Although previous studies in the areas in Asia, East Asia specifically, delivered the main demographic characteristics, such as experience, age, marital status, and uncertainty avoidance, are influential to the job satisfaction of IT employees (Benjamin *et al.*, 2021; Kuo *et al.*, 2004), the demographic factors in the Vietnam IT industry have similarity but differences with the near regions. It can be traced back to the young economy and relatively young population in Vietnam that distributes to the IT industry. Therefore, factors related to young age, college education, and little experience are likely to be the predominant factors in the participants.

4.4. Descriptive Analysis

The data set comprises 81 people's answers to various job satisfaction-related questions. The topics covered in the questions vary from general issues like overall job, the job itself and work environment, and company culture to job-specific aspects like workload, job autonomy, managerial assistance, diversity and conclusion, and corporate social responsibility. The job satisfaction scale indicates the level of agreement from 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.

Each question's mean and median values are often in the range of 3 to 4, showing that respondents are generally moderately satisfied with factors connected to their jobs. Most of the answers have standard deviation values that are usually low, indicating that the responses are generally not randomly distributed but rather grouped around the mean.

However, a few questions, such as "Salary and Benefits", "Training and Development," and "Managerial Support," had greater standard deviation values, indicating that there is a broader variety of replies and perspectives on these variables.

The findings indicate that respondents are generally satisfied with their overall jobs. Still, several areas could need improvement, including compensation and benefit (median score is 3, and

deviation score is 1.04), training and development (median score is 3, and deviation score is 0.98), and managerial assistance (median score is 3, and deviation score is 1.01).

4.4.1. Job Itself

	N	Minimum	Maximum	Mean	Median	Std. Deviation
How satisfied are you with your current Job?	81	1	5	3.62962963	4	0.94133475
How satisfied are you with your current Salary and Benefits?	81	1	5	3.333333333	3	1.024695077
how satisfied are you with your current Work-Life Balance	81	1	5	3.518518519	4	0.923459678
How satisfied are you with your current Promotion Opportunities?	81	1	5	3.271604938	3	0.880516122
How satisfied are you with your current Recognition and Rewards?	81	1	5	3.271604938	3	0.961929645
How satisfied are you with the current Training and Development your organisation supports/offers?	81	1	5	3.12345679	3	0.979575368
How satisfied are you with your Job Autonomy?	81	1	5	3.432098765	4	0.960966592

Source: (self-created)

According to the statistics, respondents to the study were generally content with their jobs and various elements of their work, with a median satisfaction level of 3 and 4 mostly. In addition, the mean satisfaction level for the current job, work-life balance and job autonomy were higher than others, with 3.62, 3.52 and 3.43, respectively. However, some areas still need improvement, including salary and benefits, promotion opportunities, recognition and rewards, and training and development, with mean scores of 3.33, 3.27, 3.27 and 3.12, respectively.

Salary and benefits are broader matters, but fair pay is proven and expected to have a positive relationship with job satisfaction (Judge, Piccolo, Podsakoff, Shaw, and Rich, 2010). The critical thing of this factor is employees' concern about fair payment in the same position (Spector, 2022). In addition, it leads to the more critical issue of procedural fairness in pay policies and equal treatment in the workplace, which means that people should be aware that the pay management policies and procedures are fair (Spector, 2022). Similarly, as the theory of Frederick Herzberg, salary and benefits are essential factors in avoiding job disappointment and recognition, and opportunities for personal development are motivating factors and enhance job satisfaction (Herzberg *et al.*, 1993). Furthermore, salary, good work-life balance, and career

prospects explicitly impact the career decisions of staff in this industry as the report (Adecco, 2023). Therefore, grasping the critical intrinsic factors at work, creating motivation, and improving employee satisfaction is a meaningful task for the HR department of IT companies in Vietnam to enhance work quality, performance, retention and recruitment activities and training and development programs.

4.4.2. Work Environment

	N	Minimum	Maximum	Mean	Median	Std. Deviation
How satisfied are you with your Work Environment?	81	1	5	3.777778	4	0.851469318
How satisfied are you with your Physical workspace?	81	1	5	3.740741	4	0.945750731
How satisfied are you with your Workload?	81	1	5	3.37037	3	0.980362745
How satisfied are you with your Managerial Support?	81	1	5	3.419753	3	1.010744744
How satisfied are you with your Work Hours?	81	1	5	3.716049	4	1.002927813
How satisfied are you with Flexibility?	81	1	5	3.703704	4	0.967528352
How satisfied are you with the Tools and Equipment?	81	1	5	3.592593	4	0.86281194

Source: (self-created)

Overall, the data suggest that the surveyed individuals were generally satisfied with their work environment and various work-related factors (physical workspace, work hours, flexibility, and tools and equipment), with a median score of 4. Notwithstanding, some areas need improvements, such as workload and managerial support.

The majority of factors reflect the satisfaction of IT employees in Vietnam for the related work environment with the higher mean score, including work environment, physical workspace, work hours, flexibility, and tools and equipment, with scores of 3.78, 3.74, 3.72, 3.70 and 3.59, respectively. In opposition, the workloads and managerial support scores were lower, with 3.37 and 3.42, respectively. This indicates that participants were generally satisfied with their workload and the management's support, with some believing they needed more on their plates and more support.

As Spector's theory and Frederick Herzberg's theory, working environment/conditions are necessary as extrinsic or hygiene factors for job satisfaction or motivation at the workplace (Herzberg *et al.*, 1993), (Spector, 1997). Therefore, all physical features and other factors of the

work environment can be the motivation or constraints for the psychological status of employees (Spector, 2022). Moreover, high degrees of perceived limitations tend to make workers feel generally unsatisfied with their occupations (Spector, 2022). Therefore, any restrictions at the workplace can lead to dissatisfaction and influence all efforts, although, they are positive.

According to this study's findings, workload and managerial styles have a controversial influence on the employees in the Vietnam IT industry. However, both elements can be qualitative and depend on the subjective assessment of the employee because overload occurs in one person with a relatively moderate workload; another person may not feel overwhelmed despite the heavy workload (Spector, 2022). Similarly, the correlation between leadership style and job satisfaction is proved in remote working, a typical working method in and after the covid-19 context, where the higher job pleasant is found in a good relationship with the manager and the least satisfaction for those who have the poor connection (Spector, 2022). A closely related issue of leadership style is company culture. Senior managers must prioritise concerns about work and people to reduce employees' negative aspects and improve the company culture in Vietnam (Quan, 2020). However, it takes effort and time to change corporate culture.

4.4.3. Company Culture and Overall Job

	N	Minimum	Maximum	Mean	Median	Std. Deviation
How satisfied are you with your Company Culture?	81	1	5	3.481481	4	0.950146188
How satisfied are you with Communication?	81	2	5	3.592593	4	0.802772972
How satisfied are you with Collaboration?	81	1	5	3.641975	4	0.84125861
How satisfied are you with Respect at Workplace?	81	1	5	3.62963	4	0.828318243
How satisfied are you with Diversity and Inclusion?	81	1	5	3.592593	4	0.877179824
How satisfied are you with Corporate Social Responsibility?	81	1	5	3.506173	3	0.86780552
How satisfied are you with Mission and Values?	81	1	5	3.62963	4	0.94133475
How satisfied are you with your overall job satisfaction?	81	1	5	3.530864	4	0.881567067

Source: (self-created)

Overall, the responses show that the participants are moderately satisfied with their jobs and other aspects relating to company culture. The mean satisfaction rating for overall job satisfaction is 3.53, indicating that employees are generally relatively satisfied with their current

job. In addition, the median rating of 4 suggests that most employees have a positive outlook towards their job. Regarding company culture, employees reported the highest satisfaction with collaboration (mean=3.64). They followed by respect at the workplace, mission and values (same mean=3.63), communication, diversity and inclusion (same mean=3.59). The standard deviation for each question of company culture factors ranged from 0.80 to 0.95, with most being between 0.85 and 0.96, which suggests that the responses were relatively consistent, with little variability among the participants.

Nonetheless, there is potential for enhancing corporate social responsibility with a mean score of 3.51, a standard deviation of 0.87 and a median score of 3, which indicates that the satisfaction levels of employees regarding corporate social responsibility varied widely, with some employees highly satisfied and others highly dissatisfied. In addition, this can affect the satisfaction in company culture overall, with a mean satisfaction score of 3.48, a mean score of 4 and a standard deviation of 0.95. This indicates that the satisfaction levels of employees regarding company culture varied widely, with some employees highly satisfied and others highly dissatisfied.

Regarding this finding, Vietnamese culture is considered the high collectivism, power distance and impact on general Vietnamese characteristics, leadership style, and company culture as the Hofstede country comparison tool (Quan, 2020), (Hofstede, 2001). This is shown in the vertical hierarchy of Vietnam organisations, which undermines the relationship-oriented leadership style in private and family organisations in Vietnam (Quan, 2020). As a result, superiors consider bureaucratic organisational culture with a vertical top-down approach and strict policies and regulations as the leading cause of breakdown in relationships among team members and potential limitation relationships between leaders and subordinates in their workforce (Tsai, 2011), (Xuan, Minh, and Hinh, 2013), (Quan, 2020). Therefore, the national culture of Vietnam impacts the organisation on company culture and leadership style. Based on the positive correlation found in this study between organisational culture and leadership style in Vietnam's IT industry, IT companies can be more aware of the causal relationship between leadership style and company culture while aiming to improve job satisfaction.

Furthermore, improving corporate social responsibility is necessary to improve job satisfaction as the study of (Shuili, Bhattacharya and Sankar, 2014) has a positive relationship between

corporate social responsibility and job satisfaction and intention to leave, significantly greater for employees own higher satisfaction on corporate social responsibility.

4.5. Correlation

Pearson correlation coefficients are used to measure all the correlations. The Pearson correlation coefficient ranges from -1 to 1, gauging the linear relationship between two variables. A perfect correlation is represented by a coefficient of 1, a perfect correlation by a coefficient of -1, and no correlation by a coefficient of 0. The stronger the correlation between the two variables, the closer the coefficient is to 1 (or -1). Table Pearson Correlation Sig (2-tailed) is used in this study to express the correlation between the independent factors and job satisfaction. In the table, a matrix has been used to describe the link between the job itself (JI), the work environment (WE), the company culture (CC), and job satisfaction (JS).

		JI	WE	CC	JS
JI	Pearson Correlation	1	0.37	0.37	0.59
	Sig (2-tailed)				0.002
	N	81	81	81	81
WE	Pearson Correlation	0.37	1	0.38	0.41
	Sig (2-tailed)				0.028
	N	81	81	81	81
CC	Pearson Correlation	0.37	0.38	1	0.63
	Sig (2-tailed)				0.004
	N				
JS	Pearson Correlation	0.59	0.41	0.63	1
	Sig (2-tailed)				
	N	81	81	81	81

Source: (self-created)

The correlation coefficients for the given variables are as follows:

JS and JI: Pearson correlation of 0.59

JS and WE: Pearson correlation of 0.41

JS and CC: Pearson correlation of 0.63

All three correlations are positive, indicating that as the factors of the job itself (JI), work environment (WE), and company culture (CC) increase, job satisfaction (JS) also tends to increase. Furthermore, the correlation coefficients suggest that the strength of the relationship between company culture and job satisfaction is the strongest (0.63), followed by the job itself and job satisfaction (0.59) and work environment and job satisfaction (0.41).

Based on the survey in this study, most employees in the IT industry in Vietnam have a neutral to very satisfied rating for different factors at work. Nevertheless, there are still differences between the participants in some respects. At the same time, as mentioned, internal factors, such as the nature of the job, and external factors of the job itself, such as the working environment and company culture, are the main factors affecting job satisfaction (Spector, 1997). Similarly, these factors are also hygiene and motivational factors that businesses need to understand to improve job satisfaction, according to the theory of (Herzberg *et al.*, 1993). Therefore, the positive correlation between job satisfaction, work environment, and organisational culture for job satisfaction is predictable through the overall survey level and relevant theories and research in Vietnam, as mentioned.

However, this study's short duration and small sample size may impact the validity and reliability of the study's findings. Short time frames may restrict the amount of data gathered and the capacity to track changes over time. In addition, the generalizability of study results to more prominent groups may be constrained by small sample sizes. Additionally, the sample size is constrained due to the unclear relationship between the population size of the IT industry and the general population and the small number of contributing questionnaires.

In such a case, a mixed-methods approach might be the best choice for thoroughly comprehending the subject. For example, in-depth interviews are one qualitative research technique that can offer insightful information about participants' viewpoints and experiences and provide a more nuanced understanding of how these factors come together, as some studies of the IT industry in Vietnam have applied, such as the impact of corporate culture on the innovation commitment of employees in this industry (Nguyen *et al.*, 2019). However, they frequently have a narrow scope and might not represent the general population. On the other hand, quantitative research techniques might offer a more thorough knowledge of trends and

patterns in the data, but they might miss the depth of personal experiences. The mixed methods approach, nevertheless, can take more time, resources, and specialised knowledge than the research can handle.

4.6. Summary

According to the correlation analysis's findings, there is an association between the job itself and job satisfaction, work environment and job satisfaction, and company culture and job satisfaction, with the Pearson correlation coefficient of 0.59, 0.41 and 0.63, respectively, showing a relatively high relationship between factors with job satisfaction. From that, it can be seen that the job itself, the work environment, and the company culture are all factors that influence job satisfaction for IT employees in Vietnam. In particular, corporate culture has important implications for the job satisfaction of employees working in the IT industry in Vietnam.

According to the findings, employees generally expressed relative satisfaction with their jobs, and associated aspects, with a median satisfaction level of 3 and 4 out of 5 mostly. However, there were differences in employees' satisfaction with various areas of their work environment. For example, employees expressed more satisfaction with their physical workspace and work environment (with median scores of 3.74 and 3.78 out of 5, respectively) than their workload managerial support scores were lower, with 3.37 and 3.42, respectively). Similarly, employees find satisfaction in company culture with a median score of 3.59 to 3.64. Nonetheless, there is a difference in corporate social responsibility and overall company culture, with a mean score of 3.51 and 3.48, respectively, and a standard deviation of 0.87, 0.95, respectively, which indicates that the satisfaction levels of employees regarding corporate social and company culture responsibility varied widely, with some employees highly satisfied and others highly dissatisfied.

Demographic analysis shows that male participation in this study predominates over females and other genders, with a ratio of 55.6%. The 18-29 age group participated the most (47%), and the education level of most respondents in the study is a university degree (54.3%). That shows that there is still a weight on the male gender and who is 18-29 years old as well as the university degree that makes up the majority in the IT field from the research participants.

Overall, the findings suggest that factors related to the job, work environment, and company culture are significant predictors of job satisfaction among the respondents. Although there are

limitations with sample size, limited time and survey of quantitative approach and understanding of the IT industry in Vietnam, the findings of this study indicate factors of the job itself, working environment, and company culture have a significant effect on job satisfaction of employees working in this industry.

V. Discussion

5.1. Introduction

This chapter discusses the research topic based on data analysis processes in which different aspects of job satisfaction have been analysed. From the finding, the job itself, work environment and company culture impact job satisfaction for employees working in the Vietnam IT industry. A point worth noting that may help future research in the IT field in Vietnam is the close relationship between corporate culture and employee satisfaction in this industry. Furthermore, the developed hypotheses in the introduction chapter, including (i) factors of the Job Itself have a positive relationship with Job Satisfaction (H1); (ii) factors of Work Environment have a positive relationship with Job Satisfaction (H2), and (iii) factors of Company Culture have a positive relationship with the Job Satisfaction (H3), have also been analysed based on data analysis to understand the relationship between factors such as work, work environment and company culture with job satisfaction. Finally, based on the hypothesis, this chapter discusses all the critical factors affecting job satisfaction. This makes sense for businesses and the Human Resources department in this field to grasp the essential elements to improve employee satisfaction and to have more appropriate policies to keep and retain and attract talent.

5.2. Discussion

5.2.1. H1: Factors of the Job Itself have a positive relationship with the Job Satisfaction

The analysis has shown that different factors in the job, culture, and environment at the workplace positively impact overall employee job satisfaction. In particular, the hypothesis on the positive correlation between factors relating to the job itself and job satisfaction is proved in the data analysis. Additionally, both theories have been mentioned in this study: Frederick Herzberg and Spector both show factors inside work such as salary, company policy, nature of work, level of challenge and skill, task autonomy, career opportunities, hygiene aspects, internal factors must be followed in the office to avoid negative influence on job satisfaction (Herzberg *et al.*, 1993), (Spector, 1997). The essential job elements, including fair salary, work-life balance, chances for professional growth, training and development opportunities, contribute significantly to job satisfaction in the Vietnam IT sector (Quan, 2020). It mainly affects the mental and physical health of the employees. High productivity, efficiency, profitability, or commitment can only be expected if employees are satisfied with their jobs. Therefore, salary and benefits

packages are essential in attracting and retaining talented employees because they provide financial security and peace of mind. On the other hand, all the factors have interrelationships. A positive work environment is necessary to improve employees' psychological health, job satisfaction and work-life balance. At the same time, this can be achieved by promoting open communication, cooperation, and recognition and providing opportunities for growth and development. A positive work environment can also be created by ensuring employees have access to resources, training and development opportunities, and facilities supporting their health and well-being.

5.2.2.H2: Factors of work environment have a positive relationship with job satisfaction.

Among other factors, the work environment is one of the important factors when analysing the job satisfaction of employees in an organisation, especially in the Vietnam context. The analysis has shown that several IT staff in Vietnam with high overall job satisfaction may be dissatisfied with the support of the management and the workload. However, considering many different working environment factors, it still shows a positive relationship between elements of the working environment and job satisfaction overall. (Quan, 2020) The task-oriented leadership style has no significant influence on creating an effective working environment in the Vietnamese context because the lack of local staff interest in this problem or leadership style has little impact on other factors. Moreover, factors related to the working environment and the management's support are necessary to avoid employee disappointment (Herzberg *et al.*, 1993). They are also external factors that companies need to consider to ensure employee satisfaction (Spector, 1997). Therefore, aspects such as workload and managerial style influence employees but do not reflect the full impact of the working environment on employee satisfaction. In conclusion, satisfaction with the working environment is still a possible condition that positively impacts employee satisfaction as the analysis. Nowadays, work pressure increased significantly in the IT section in Vietnam. Long-time pressure due to work purposes can also develop emotional exhaustion and reduce employee satisfaction and productivity. The huge workload and closed working environment cause frustration for employees when management has problems. Any single problem can affect employees' psychology and job satisfaction if it exists for a long time. Paying attention to the needs of employees is the top issue of IT companies to improve existing problems to retain and attract better talent.

5.2.3.H3: Factors of Company Culture have a positive relationship with the Job Satisfaction

The company culture is another factor influencing overall job satisfaction significantly in terms of the analysis of this study. The research has shown that delighted employees of the IT section in Vietnam with the corporate culture have higher job satisfaction. Organisational culture is crucial because it affects whether people are content at work and directly impacts the employee's commitment to the organisation (Quan, 2020), (Nguyen *et al.*, 2019). Additionally, it emphasises the benefits of an innovative, creative, and flexible culture for employee satisfaction and the effectiveness of new products (Xie, Wu, Xie, Yu and Wang, 2021). Therefore, company culture has a positive impact on employee satisfaction. However, many employees working in the IT industry in Vietnam realise that there still needs to be more interest in corporate social responsibility from businesses based on the data analysed in this study. This aspect may be limited in Vietnam, but the needs of employees should be heard to innovate more favourable policies and activities for society. For such purposes, employers can motivate staff to participate in community service projects or donate to charitable organisations, give training and development programs, enable chances for career progression, encourage work-life balance, and create an environment that values diversity and inclusion. By implementing these ideas, employers can improve their company's reputation, recruit and keep top personnel, and create a more sustainable and socially responsible firm.

5.3. Limitation of the research

This study is conducted based on the primary quantitative method to approach the data set from employees working in the IT field in Vietnam. In this case, the data and information collected are analysed according to a specific approach to understanding the relationship between factors and job satisfaction to determine the key factors that affect job satisfaction. However, the most accurate results did not come from this study to develop the most relevant conclusions as the limitation on size and time. Since the population size of the IT industry with the Vietnamese population is not clearly defined, the number of questionnaires contributed was limited, resulting in a limited sample size, which may affect the reliability and validity of research results. On the other hand, the questionnaires of this study are distributed based on relationships; the author's contacts should be limited in sample size and cannot reach many different applicants in the IT industry in Vietnam. In addition, only three main variables have been considered factors

affecting job satisfaction by analytical method. In this case, more factors must also be used, which is another limitation of this study. Furthermore, language barriers limit the reach and impact of research and may limit research accessibility for non-English speakers.

Recommendation for the research

- This study was developed over a short period and small sample, which is a significant limitation of this study. As a result, increasing the population size and time for research could be more effective in achieving better results on critical factors affecting job satisfaction for IT industry employees in Vietnam.
- In the primary analytical process, a standard method is used. At the same time, other primary methods, such as the mixed-methods approach for research design, can also be implemented to achieve greater efficiency in data analysis and information.

5.4. Recommendation for Future Research

Future research is expected to address the limitations of this study to increase the validity and reliability of the research findings.

To address size and time constraints in future research, future research may consider using more sophisticated sampling techniques to increase the number of participants and improve the sample's representativeness. This may include stratified sampling, cluster sampling, or systematic sampling. Alternatively, to solve the problem of restricting the number of participants due to the restriction of sources of participation from contacts, and author relationships, future researchers may consider using online survey platforms, including social media or online forums, to reach larger populations in a short period. Finally, to solve the problem of the unknown population size of the IT industry in Vietnam, researchers may consider using secondary data sources such as government reports, industry association data or market research to understand population size better.

At the same time, a multi-method approach may be the best choice for thoroughly understanding the topic. For example, in-depth interviews for research related to the IT industry in Vietnam can provide insights into participants' perspectives and experiences and help better understand how these factors combine as in the study (Nguyen et al., 2019). On the other hand, quantitative research techniques can provide a more thorough knowledge of trends and patterns in data.

Therefore, future studies are expected to use a mixed methods approach to bring more objective validity and reality to research on this topic.

Future research is expected to compare different industries in Vietnam. This can help researchers understand the industry's unique characteristics, such as work culture, roles, and responsibilities. Also, design surveys and questionnaires tailored to the specific needs and expectations of industrial IT in Vietnam, identifying best practices that can be implemented in the IT industry to enhance work satisfaction, and researchers can facilitate interdisciplinary collaboration and knowledge sharing.

From data analysis related to specific demographic factors (gender, age, education level and work experience) that may affect job satisfaction in the IT industry in Vietnam, future research is expected to consider demographic factors and job satisfaction in this industry. In addition, job satisfaction can be studied more comprehensively based on elements from HR practitioners and employers because the employee life cycle from recruitment and retention to leaving all has a particular impact on the employer and the HR department.

Future researchers can apply these recommendations to potentially mitigate the limitations of small sample sizes and indeterminate populations and improve the robustness of their findings.

In addition, this study shows that company culture is a factor that strongly impacts job satisfaction. Finally, although quantitative research is limited to related to the main research questions, the following intriguing topics were briefly covered in questions worth further investigation:

- According to research, effective leadership and management practices may have significant improvements to be more favourable for job satisfaction. Therefore, future research may examine how leadership and management practices, such as employee empowerment and recognition, affect job satisfaction in the IT industry in Vietnam.
- According to data analysis, organisational culture is vital in shaping employee attitudes and behaviours and directly affects job satisfaction. Therefore, future research may investigate how corporate culture affects job satisfaction in the IT industry in Vietnam and how organisations can create a positive culture that promotes job satisfaction.

- Vietnam's unique culture can impact job satisfaction differently than other countries in the Eastern area. Future research may explore the influence of cultural factors, such as Confucian values and Feng Shui, on IT industry job satisfaction.

5.5. Summary

It can be summed up from the discussion above that the hypothesis was formulated based on the relationship between factors of the job itself, work environment, and company culture, and job satisfaction is positive. In this case, the organisation needs to learn more about employees' specific needs to improve the job design, provide meaningful work, and create a positive work environment and innovative company culture to increase job satisfaction. However, this study's findings on various corporate culture factors show no discernible differences, and job satisfaction and company culture have a strong association. Previous studies also provide the company culture factor that significantly impacts job satisfaction in Vietnam (Quan, 2020), (Nguyen *et al.*, 2019). However, this study has a more in-depth look at the IT industry in Vietnam, so there will be some differences. Moreover, this study used statistical analysis with IT industry participants to make the information more practical and essential.

Nevertheless, based on the positive relationship between factors about the job itself, work environment, company culture and job satisfaction, they provide valuable insights into factors related to job satisfaction in the Vietnamese IT sector. At the same time, such findings can help companies create a more positive work culture, increase employee retention, attract top talent, and improve productivity. This can lead to significant benefits for both the company and its employees. On the other hand, the limitations of sample size, population size, and time limit can help future research to improve the limitations by applying a mix-methods approach, another sampling method, using secondary data sources to enhance the reliability and validity of the research results and can contribute to many perspectives and research on labour in the Vietnam IT industry.

VI. Conclusions and Recommendation

6.1. Conclusion

Job satisfaction is always an essential factor for human resource management of every corporation because it is closely associated with turnover rate and intention to leave (Vijayan, 2018). In the IT industry in Vietnam, the shortage of permanent resources is an inherent problem where businesses need to pay more attention to job satisfaction and learn the key factors affecting it. Furthermore, specific aspects related to remuneration and benefits, work-life balance, prospects for recognition, training and development, workload, managerial support, and corporate social responsibility should be carefully considered to propose policies and improvements more useful. One of the critical elements influencing job satisfaction is the company's investment in its employees through training and development programs (McGilton, K. S., Boscart, V. M., Brown, M., & Bowers, B., 2014). These programs enhance employee skills and knowledge, creating a sense of accomplishment and fulfilment. At the same time, training and development, opportunities for advancement, recognition and rewards are also essential in creating a positive work environment and conveying the company culture. Since the factors are interrelated, enhancing the separated characteristics can positively affect employees' overall job satisfaction.

Therefore, it is advised that the business concentrates on improving its corporate culture, ensuring that employees fulfil meaningful tasks, and creating a pleasant work environment. Furthermore, to maintain high levels of job happiness, which can improve employee retention, engagement, and productivity, the organisation should assess employee satisfaction levels regularly and swiftly resolve any problems.

6.2. Recommendation

A few recommendations are advised for organisations to enhance employee job experience, which is given below.

- Businesses should concentrate on enhancing job design and giving employees meaningful work since the job itself significantly impacts job satisfaction. An employee's job satisfaction experience can be achieved with the right job design, including task variety, autonomy, and feedback (Elizabeth, Kristi, Jun and Christopher, 2015). In Vietnam's IT industry, meaningful work helps an individual satisfy, aligns with their values and beliefs,

and has been identified as a critical factor for attracting and retaining talent in the industry, a highly competitive job market (Quan and Nancy, 2014). In addition, companies in Vietnam's IT sector can give employees a sense of purpose and fulfilment beyond monetary pay by giving them meaningful work.

- Creating a positive workplace culture is crucial to improving job satisfaction. In addition, the importance of elements like physical comfort, psychological safety, and social support should be prioritised by businesses. According to (Yu and Choi, 2016), having a positive workplace culture can increase employee productivity, lower turnover rates, and overall job satisfaction. In the IT sector, where workers are frequently expected to put in long hours and solve challenging challenges, a supportive work environment can assist in reducing stress and avoiding burnout. Additionally, a supportive work environment can encourage employee collaboration and communication, both essential for creating original solutions to challenging issues.
- A key element in boosting job satisfaction is company culture. Previous studies have shown that the most critical aspect of company culture in the IT industry in Vietnam is work-life balance, good relationships with colleagues and support from management (Nguyen *et al.*, 2019). In addition, leaders should create an environment where respect, open communication, and employee well-being are valued. Therefore, a pleasant company culture also positively impacts the working environment that can attract and retain top talent in Vietnam's IT industry. In short, understanding and prioritising company culture are important for the success of companies operating in the Vietnamese IT industry.
- Organisations should regularly gather employee feedback to understand their requirements and preferences better. Employees who receive feedback can feel recognised and appreciated, boosting their motivation and engagement. This is especially important in the Vietnamese context, where traditional management techniques favour top-down decision-making and discourage frank dialogue between employees and management (Quang and Vuong, 2002). Organisations can foster a more inclusive and collaborative work environment that encourages innovation and productivity by asking for employee feedback and acting on it. In addition, management can demonstrate a

commitment to solving employee problems and improving the overall work environment by making changes based on employee feedback.

- Businesses should understand how important job satisfaction is to keeping staff members and fostering a healthy work atmosphere. Investments in employees' well-being and job satisfaction can significantly impact long-term organisational success. Therefore, Vietnamese businesses in the IT industry should prioritise job satisfaction as an essential factor in the success of their organisation. By investing in employee well-being, companies can create a positive and healthy work atmosphere that promotes employee retention and increases productivity. This can be achieved through various initiatives, such as providing wellness programs, creating a positive work environment, and fostering a work-life balance.

Furthermore, this study has examined the main factors affecting satisfaction in the IT industry in Vietnam to identify the key factors that IT companies can pay attention to and invest in improvements to improve employees' job satisfaction and the long-term impacts on retention and recruitment. At the same time, the findings of this study show the importance of surveying and listening to employees' opinions, especially in the competitive IT field regarding labour resources and able to significantly contribute to Human Resources practices, including some ideas as follows:

- Ideas about retention interviews can be suggested and applied in the working duration of employees to make improvements, and assessment before an exit interview is often not meaningful in retaining talent. This may increase the rate of staff retention, which could result in significant cost savings for businesses.
- Companies can modify their recruitment strategies to attract applicants more likely to be content with their jobs by studying what elements are significant to job satisfaction in Vietnam's IT sector. This can aid businesses in attracting top people and raising the general level of their workforce.
- Higher productivity has been associated with job satisfaction. Employee engagement and motivation can be gained when they feel satisfied with their work and can contribute to higher productivity.

- As findings have shown a positive relationship between company culture and job satisfaction, companies can create a more positive workplace culture by taking the necessary steps to improve employee job satisfaction. This can improve employee morale, teamwork, and a more engaged workforce.

6.3. Recommendation to fulfil CIPD requirement.

In Vietnam's IT industry, company culture is proven to impact job satisfaction through this study. A positive corporate culture can be fostered through effective training programs. A company's culture refers to the values, beliefs, behaviours, and practices that guide how employees interact with each other and with the organisation. A positive company culture can foster community, trust, and motivation among employees, increasing their job satisfaction. Based on the research, recommendations will be made to improve corporate culture, which can positively affect job satisfaction for employees in Vietnam's IT industry. The recommendations will take into account any potential impacts, including financing and availability of resources, as follows:

Training and Development

According to data analysis from this study, Corporate Social responsibility content is one that employees are not completely satisfied with within IT companies in Vietnam. Therefore, it is proposed that further training, leadership development, and social responsibility will be the focus of the leadership and company culture training program for management roles, from managers to senior manager level. The program's primary purpose is to develop people management ability, develop the capacity of individuals and subordinates, and understand and transmit core values and corporate culture to all colleagues. Thus, they are expected to be able to participate in orientation and induction sessions to be able to better convey the company's values and culture to new employees besides the Human Resources department. The data analysis also shows that young people aged 18-29 are the main force participating in this industry. Therefore, all managers must be trained to best perform their leadership and management roles in this work environment. These pieces of training will be delivered through the Zoom online platform with a local vendor on learning services, such as Adecco Vietnam, a well-known training services provider. The corporate culture is the unique characteristics of each company formed by the founder, the group of influential people in the organisation spreading that organisation's values,

behaviours, and actions. Therefore, the program will be tailored to meet each company's unique culture and core values. Therefore, this recommendation may take some time to implement. A small group size of 5-10 people per class is recommended to ensure personalised attention and maximise the effectiveness through each section. The program is recommended to be conducted three days per week, with each session lasting two hours to suit the schedule of management positions. The section's timeline is recommended in the evening or early evening after working hours to accommodate the participants' schedules. Finally, this program costs 2,000,000 dong/hour (equivalent to 77 euros/hour) for three months with a monthly payment.

VII. CIPD Requirements Section

Personal Learning Statement

This exciting topic attracted me when I worked in an IT product company in Vietnam. The potential of the IT industry for the Vietnamese economy is undeniable, especially in the era of the digital economy across the countries. But the need for more personnel is always a constant problem at technology companies in VN. Therefore, businesses are always interested in investigating and improving employee policies and benefits to attract and retain them. However, more than generic and unsuitable policies for specific companies are needed to improve high turnover rates and turnover intention in this market. Therefore, I hope this topic can help to find out the critical factors affecting job satisfaction in the IT industry in Vietnam. Furthermore, the research provides insight into the factors IT employees in Vietnam are interested in to gain job satisfaction. Therefore, I can learn about job satisfaction's relevant theories and material. This project allows me to liaise, build relationships, and discover that these matters concern many IT employees. In addition to learning a great deal about various research methodologies, I developed new research, assessment, and critical analytical abilities. Therefore, I appreciate the opportunity to learn new skills in my career in the future.

On the other hand, this research is complex for me to arrange my time with multitasking simultaneously. Moreover, this dissertation has been my most challenging academic challenge because I have never completed one for the same degree. But this experience differs entirely from my past working duration, and the rewarding feeling and much learning in conducting the postgraduate research project. But the most important lesson I learned was organising and managing time. Having a strategy before starting your research assignment is essential so that you have enough time to focus on all assigned chapters because primary data collection takes longer than expected. Setting a specific deadline and strictly following it to ensure sufficient participants was important when undertaking this project. At the same time, I have experience in recognising the limitations of this research. Therefore, if I had more time and the opportunity to change, I would manage my time and stick to my plan, conducting the survey earlier to achieve a higher sample size that would reflect more accurate study results and more time to combine the survey and in-depth interview to give a more comprehensive view of this project.

I, therefore, share some of my lessons from this project:

- Set goals and plans for yourself and monitor strictly to accomplish them right.
- Ignore negative inner thoughts and try not to force yourself so hard.
- Make the most of the opportunities to access official information sources, as they are all useful.

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Appendices

Appendix 1: Consent form

Dear Applicant,

My name is Nhung Truong, a master's student at the National College of Ireland and conducting a project called "The investigation of the factors that affect job satisfaction in the Vietnam IT industry". As part of this study, I would like to conduct an online questionnaire with you to gather your personal choices and options. This questionnaire, conducted via Google Form, includes 22 questions with multiple choice and 2 optional questions, which take 7 – 10 minutes to complete.

Your participation in this study is entirely voluntary, and participants can withdraw at any stage without any consequences. However, the data will be recorded and stored securely to ensure accuracy. Only the researcher and authorised personnel will have access to the recordings, which will be deleted after the study is completed.

The data collected for this survey will only be utilised for research, and the final report will present it in aggregate form. Therefore, your identifiable information will be kept private and not revealed and removed during data analysis.

Your participation will help me comprehend the factors that affect Job Satisfaction in the Vietnam IT Industry and contribute to improving job satisfaction and related factors in the Vietnam IT industry.

If you agree to participate, please indicate your consent by replying to this email with "I consent to participate in the study". If you choose not to participate, there will be no adverse consequences.

Please let me know your questions or concerns about the study. Thank you for your time and consideration.

Sincerely,

Nhung Truong

Appendix 2: Questionnaire on Job Satisfaction

I. Demographic questions:

1. What is your gender?

Female

Male

Prefer not to say

2. What is your age?

3. What is your educational level?

Primary school

Secondary/ High school

Undergraduate

Postgraduate education (Master/Ph.D)

4. What is your employment status?

Full-time

Part-time

Freelancer/ Contractor

Other

5. How many years have you been working in your current job?

6. What is your job level?

Less than one year

1 – less than 5 years

5 – less than 10 years

10 – less than 15 years

15 – less than 20 years

20 – 25 years

II. Job Satisfaction scale

JOB SATISFACTION SCALE						
	Meaning of scale 1-5: Scale of 1-5 indicates 1 as very dissatisfied, 2 as dissatisfied, 3 as neutral, 4 as satisfied and 5 as very satisfied.	VERY DISSATISFIED	DISSATISFIED	NEUTRAL	SATISFIED	VERY SATISFIED
1.	On a scale of 1-5, how satisfied are you with your current job?					
2.	On a scale of 1-5, how satisfied are you with your current Salary and Benefits?					
3.	On a scale of 1-5, how satisfied are you with your current Work-Life Balance?					
4.	On a scale of 1-5, how satisfied are you with your current Promotion Opportunities?					
5.	On a scale of 1-5, how satisfied are you with your current Recognition and Rewards?					
6.	On a scale of 1-5, how satisfied are you with your current Training and Development your organisation supports/offers?					
7.	On a scale of 1-5, how satisfied are you with your Job Autonomy (e.g. right for decision making, task autonomy, technique autonomy)?					
8.	On a scale of 1-5, how satisfied are you with your Work Environment?					
9.	On a scale of 1-5, how satisfied are you with your Physical workspace (e.g., lighting, noise level, cleanliness)?					
10.	On a scale of 1-5, how satisfied are you with your Workload?					
11.	On a scale of 1-5, how satisfied are you with your Managerial support?					
12.	On a scale of 1-5, how satisfied are you with your					

	Work hours?					
13.	On a scale of 1-5, how satisfied are you with your Flexibility (e.g. flexible work schedules, remote work options, job sharing, alternative work arrangements)?					
14.	On a scale of 1-5, how satisfied are you with your Tools and equipment?					
15.	What other aspects of your Work Environment contribute to your job satisfaction (optional)?					
16.	On a scale of 1-5, how satisfied are you with your Company Culture (e.g.mission statement, leadership style, communication, employee engagement)?					
17.	On a scale of 1-5, how satisfied are you with Communication?					
18.	On a scale of 1-5, how satisfied are you with Collaboration?					
19.	On a scale of 1-5, how satisfied are you with Respect at Workplace (e.g. treating all colleagues with dignity, courtesy, and consideration, recognising your worth, acknowledging your contributions)?					
20.	On a scale of 1-5, how satisfied are you with Diversity and Inclusion (e.g. environment where people of different backgrounds, experiences, and perspectives feel valued, respected, and included)?					
21.	On a scale of 1-5, how satisfied are you with Corporate Social Responsibility (e.g. responsibility for the impact of the company on society, the economy, and the environment by integrating them into their operations and business strategy)?					
22.	On a scale of 1-5, how satisfied are you with your					

	Mission and Values?					
23.	What other aspects of your Company Culture contribute to your job satisfaction (optional)?					
24.	On a scale of 1-5, how satisfied are you with your overall job satisfaction?					