

# EMPLOYEE CHARACTERISTICS AND JOB SATISFACTION: THE INFLUENCE OF DEPRESSION, ANXIETY, AND STRESS IN A COMPOSITE AEROSPACE MANUFACTURING COMPANY

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## ARTICLE HISTORY

Received: 06 October 2021

Accepted: 31 December 2021

## KEYWORDS

Job Satisfaction  
Depression  
Anxiety  
Stress

## Abstract

Job satisfaction comes from interacting with coworkers, making an effort to learn, and ultimately, doing the right thing although no one is looking. Managers have a common and complex issue of improving staff's job satisfaction. The staff's positive reaction was realised from the work outcomes and their attitude. Job satisfaction also is a mix of good and negative opinions that employees experience about their jobs. Job satisfaction is defined as a worker's sense of accomplishment, and success on the job is commonly considered closely related to productivity and personal quality of life. Job satisfaction explained the logic is that a satisfied employee is a happy employee, and a happy employee is a successful and productive employee who will contribute to the employer's success by delivering superior quality results within the time limit and contributing to increased profits. This research study proposed to be conducted in one of aerospace company located in Malaysia which had 2,224 employees. Many researchers found that job satisfaction has a powerful influence on worker motivation. Worker motivation has an impact on productivity and, therefore, on commercial organisations' success. Employee well-being and characteristic are essential factors to measure and see the influence and relationship against job satisfaction. SPSS will be a quantitative statistical tool in measuring the significance between employee characteristics and job satisfaction.

## 1.0 INTRODUCTION

Every successful company has its vision and mission, and to achieve the goals, they need committed, motivated, and dedicated employees. Therefore, keeping employees happy and having a high level of job satisfaction is essential for any organisation in the world. Locke E. (1976) had defined job satisfaction as "an enjoyable or positive emotional state arising from the evaluation of one's job or job experiences," which is one of the most used definitions in organisational research. According to Hoppock.R (1935), job satisfaction is "any combination of psychological, physiological, and environmental conditions that lead a person genuinely to declare I am happy with my job." According to Saari & Judge (2004), job satisfaction indicates employee behavioral outcomes such as turnover and absenteeism. Employees satisfied with their jobs mostly have positive internal work motivation, high-quality job performance, and lower turnover and absenteeism Baghaei (2011). Research in between job tension and job satisfaction to the executive levels of the apparel industry in Anuradhapura District of Sri Lanka found that reducing

job tension will enhancing job satisfaction to the executives

When job satisfaction increases among employees, these influences and leads to the higher organisational commitment of employees and high commitment. As a result, it will positively impact organisational success (Saari & Judge, 2004). Many researchers claimed that the link that exists between employee job satisfaction and employee turnover on organisational commitment. A previous study to the employee at Lagos University found there was a significant influence between job satisfaction and turnover intention on organisational commitment

Job satisfaction may be defined as the gap between what a person wants or expects from a position and what that person delivers (Price, 2001). Job satisfaction is a frequent topic in organisational behavior study, and it is a critical component in the design of job tasks and management (Spector, 1997). Low motivation and job satisfaction among nurses can negatively impact emotional disengagement, negatively impacting patient outcomes (Molyneux, 2011).

Furthermore, because physical and psychological stress associated with absence due to sickness is every day among health care employees, job satisfaction is an essential constituent in the health care industry Letvak (2013); Wall, et al. (1997). Research conducted on the nurses working in mental health hospitals in Sweden discovered that four factors from Herzberg's theory significantly correlate between job satisfaction and recognition, responsibility, relations with coworkers, and salary.

Based on previous researchers, measuring job satisfaction, and achieving reasonable job satisfaction among all employees is essential. The problems about job satisfaction occur in many industries and services such as the health industry, education, and textiles.

### 1.1 Background

CTRM Aero Composited Sdn Bhd (CTRM AC) was incorporated on 28th August 1990. On 4<sup>th</sup> November 2013, DRB-HICOM Group acquired CTRM from the Ministry of Finance Inc. CTRM AC's primary business focuses on aerospace and composites manufacturing. CTRM AC had 2,224 employees' strength and manufacturing composites aerospace parts for Airbus and Boeing aircraft. CTRM AC has manufactured composites parts for various aircraft models since the year 2000, which 4 Airbus models (A300, A320, A380, and A400M) and 4 Boeing models (B737, 767, 777, and 787). CTRM AC has been endowed with a strategic role in developing a high-technology-based sector, specifically the Aerospace and Composites industries. The Ministry of Finance Inc. sold its stake in CTRM AC to DRB-HICOM, a Malaysian company, in November 2013. CTRM AC is also a second-tier supplier to Spirit Aero systems, Collins Aerospace, Airbus UK, GKN Aerospace, Airbus Defense & Space, Sonaca, Turkish Aerospace Industries. Their primary customer is Airbus and Boeing. CTRM AC has been operated on for more than 20 years; therefore, job satisfaction among all employees is vital CTRM (Corporate CTRM AC - About Us, 2016). AC is a single-source supplier to Airbus and Boeing and a global supplier in aerospace composite products and is delivered to various countries, as shown in Figure 1



Figure 1: CTRM AC Customers (Source: CTRM AC)

Boeing Company (Boeing) and Airbus have historically constituted a strong duopoly in the commercial aircraft manufacturing sector. The annual backlog contest between Boeing and Airbus seems to have been dominated by Boeing in 2016. However, the outlook for 2017 favors Airbus due to the expected resolution of many manufacturing implementation issues, which will result in more impressive deliveries the following year. Not all commercial aircraft families or types, however, have met their delivery targets. Beginning in 2017, Airbus Group increased its annual delivery target from 650 to 670 aircraft (Semester, Kitner, & Gkougkousi, 2017). Figure 2 depicts the market segmentation as specified, with key European and other global market leaders highlighted. In general, the US financial market is the most active and dangerous. As a result, US corporations tend to outperform European rivals on a simple multiple basis and in terms of market valuation.

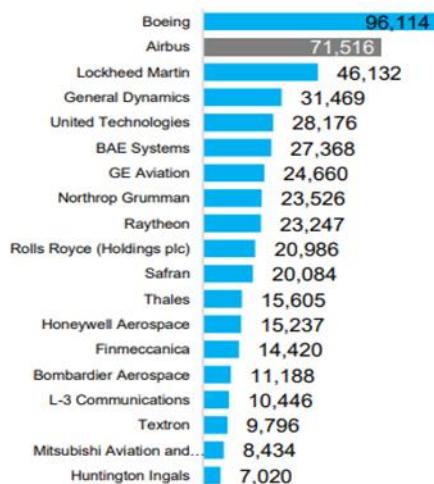


Figure 2: Global Leading A&D Manufacturers 2015 by Sales in USDmn. (Source Statista)

Commercial aerospace industries are predicted to grow substantially over the next decade as passenger numbers increase. New large aviation cities emerge, particularly in countries with solid GDP and population growth, such as Asia-Pacific, Latin America, and the Middle East. Airbus is expected to increase its market share in new planes deliveries and refurbishment, leaving the industry with a 50-50 split. Figure 3 illustrates that revenue has been increasing over the last five years.



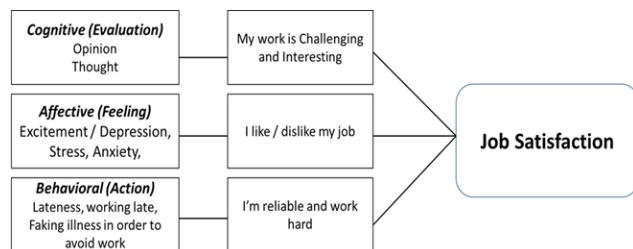
**Figure 3:** Airbus Aerospace & Defense 5 year's revenue trend. (Source: Aerospace Composites Market Published Date: Jul 2020)

Therefore, CTRM AC has a bright future and opportunity in the business growth based on a rapid aerospace business market, as seen in figures 2 and 3 above. Consequently, CTRM must increase job satisfaction and manage the well-being of employees from depression, anxiety, and stress. The effects of depression, anxiety and stress on employees may result in low revenue, profits to the company due to poor quality, cost and delivery.

## 2.0 LITERATURE REVIEW

### 2.1 Job Satisfaction

A person's job satisfaction is a collection of excellent and negative feelings about his or her job. Job happiness is an essential factor in motivating and encouraging employees to perform better. Employment satisfaction assesses a worker's pleasure with their job, whether they like the job or specific aspects of the job, such as the nature of the work or supervision. Job satisfaction may be measured in three ways: cognitively (evaluative), affectively (or emotionally), and behaviourally. Job satisfaction relates to how satisfied or dissatisfied employees are with their jobs (Spector, 1997). Furthermore, it includes evaluative, cognitive, and emotional components that contribute to excellent performance and devotion to the organisation (Ghazzawi, 2008). Job satisfaction and job discontent are caused by emotional components such as sadness, anxiety, and stress. The relationship between the three components and work satisfaction is depicted in Figure 4.



**Figure 4:** Relationship between the Three Components and Work Satisfaction (Source: Bernstein & Nash)

Job satisfaction has been studied in terms of various characteristics such as occupation, job outcomes, personality qualities, and well-being. Researchers have also discovered that the extent to which work satisfaction surveys accurately capture job-related feelings differs. One of the most common definitions of job satisfaction in organisational is an enjoyable or good emotional condition that comes from assessing one's work or experiences (Poursadeghiyan, 2016). Some studies define it simply as an individual's level of job satisfaction; how much they like their job. According to the research, job satisfaction is impacted by several factors. (Spector, 1997) created a "job satisfaction measuring scale" to measure employees' job happiness, including income, benefits, supervision, advancement, nature of work, and peers (Saleem, 2015). The 14 aspects include appreciation, communication, employees, marginalised benefit, and employment circumstances, working environment, organisation, personal growth, regulations and procedures, opportunities for promotion, recognition, safety and supervision (Baghaei, 2011). Satisfied personnel are more likely to be motivated internally, produce high-quality jobs, and have less absence and sales. Employees who obtain the salary, benefits, advancement, job type, supervision, and co-workers they seek are more likely to be satisfied and stay with the company. According to (Chandrasekar, 2011), to improve business sales, a firm must provide a healthy work environment that increases employees' capacity to become more productive. There are numerous misconceptions about job satisfaction. A common misconception is that a happy employee is productive (Syptak, Marsland, & Ulmer, 1999). There is no evidence to imply that a happy employee is better productivity. In fact, according to certain studies, casualness may seep in, changing the focus from production to satisfaction (Bassett, 1996). As a result, if a correlation exists, it is a weak one. Employee happiness has no detrimental impact on productivity and can positively impact the company and society. It also has a beneficial effect on the organisation's brand image. As a result, having happy and contented staff helps all parties. In truth, employees are more contented when they love their working environment. According to several researchers, job satisfaction has received more attention in today's organisations since it will assist organisations in preserving experienced, skilled, and competent personnel (Zainab, Khulood, A., & Froelicher, 2012); (Elizerbeth & K.A, 2015). Furthermore, job satisfaction increases employees' motivation and directly influences work quality and staff productivity (Arif & Ilyas, 2013); (Aaron, Singhapakdi, & Vivian, 2015). Additionally, job satisfaction increases employee motivation and directly influences job quality and staff productivity (Arif & Ilyas, 2013); (Aaron, Singhapakdi, & Vivian, 2015). Furthermore, job satisfaction fosters loyalty, trust, and dedication to the business (Kasim &

Abdul, 2012). It has resulted in increased productivity and avoiding undesirable behaviours like turnover and absenteeism. Job satisfaction is related to what employees want. It is a critical component of employee retention, which can only be achieved by making them feel physically and mentally at ease. Employee retention is improved by job satisfaction. Employee retention is predicted by job satisfaction, which is a reliable and meaningful predictor. It is advised that companies participate in measures that promote excellent working relationships and rewards; job satisfaction improves because employees think the firm is utilising their abilities and recognising their service and dedication. In turn, better levels of work satisfaction lead to higher levels of employee retention (Gould-Williams, 2003). Frederick Herzberg claimed that job happiness is on one side and job discontent is on the other. He defines work qualities differently for job satisfaction and job discontent. According to his idea, these two sorts of variables can be classified as motivators and hygienic factors. Motivators such as the potential for growth and development, appreciation, and achievement are used to increase job satisfaction among employees, while hygiene factors such as interpersonal relationships, remuneration, and work environment must be encountered by the organisation to prevent job dissatisfaction among employees (Khanna, 2017).

## 2.2 Depression, Anxiety, and Stress

Depression, anxiety, and stress are all prevalent issues for today's employees. Although valuable work, or relevant work, enables personal progress, and contributes to a better purpose, has been related to improved mental health, people's jobs may also need to be gratifying or pleasurable to enhance results. According to a previous research study, nurses are the largest professional group in the health care industry, and they are subjected to a high degree of occupational stress. Work-related stress is likely to significantly impact nurses' depression, anxiety, and work satisfaction. High stress levels can reduce the quality of treatment and patient safety, resulting in medical mistakes and issues with patients. As a result, decreasing work-related stress and maintaining healthy psychological stress among nurses is critical to preventing medical mistakes and enhancing nursing care quality. It will impact job stress and poor functioning skills, which elevates job stress and, as a result, reduces the nurses' overall health (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002). Job-related stress has been connected to fatigue and physical

and mental health effects. Likewise, job-related stress has been associated with job satisfaction. Another study was done on teachers, who are anticipated to have greater levels of job stress than those in white-collar professions. Teacher-student conflict, teacher-family conflict, student disciplinary issues, insufficient

assistance, lack of advancement, unhappy colleagues, and insufficient engagement in school decision-making have contributed to difficulties (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002). Teachers suffer from negative impacts such as stress, anxiety, work discontent, intentions to quit, and physical and psychological discomfort due to these issues Cokluk (2014); Aiken, Clarke, Sloane, Sochalski, & Silber (2002). Teachers' dissatisfaction is believed to reflect on pupils, causing issues in the education system to worsen. It has been confirmed that under pressure, teachers may achieve excellent job outcomes by utilising stress and their positive psychological capital competency. As a result, Cokluk (2014) established positive stress based on positive psychological capital

Recent research was conducted among emergency physicians during the COVID-19 outbreak in Istanbul, Turkey. Research objectives are to find out the relationship between burnout, job satisfaction, and psychological symptoms. They discovered that the level increases from mild to extremely severe on depression, anxiety, and stress symptoms. The level of job satisfaction also experiencing significantly low because of the rapid spread of the disease, the absence of definite treatment, the lack of vaccine development, uncertainty about the effectiveness, and the worldwide supply of vaccines to be created, the fight against COVID-19 will take a long time (Bradley, 2014).

Currently, all organisations consider job stress and job satisfaction of their employees as two essential workplace issues. Recent studies found job-related stress, depression and anxiety are caused by job mismatch, lack of resources, incapability, an environment of the workplace, management, safety and health hazard. Job satisfaction refers to an employee's overall attitude toward his or her job. It can be regarded as an overall attitude toward the job or as a connected general attitude about various aspects of the employment. Job stress is a significant contributor to job satisfaction. When stress acts as a negative element, it causes aggressiveness and low job satisfaction. Job satisfaction may shield employees from stress. Theories supported that employee satisfaction directly influenced productivity throughout the neoclassical period (1920-1950). Theories supported the notion that employee satisfaction had a direct impact on productivity. They felt that there was a cause-and-effect link between satisfaction and production. This solved the question of why businesses attempted to enhance employee productivity in various ways.

These two elements (job stress and job satisfaction) may have a detrimental influence on a working group's efficiency and, as a result, contribute to a company's costs. According to research done in the Iranian petrochemical sector, job satisfaction decreases during the middle years of employment

owing to job repetitiveness and job limitations; beyond this time, job satisfaction improves consistently with age. This rise is supported by Herzberg's idea of "modified expectation." According to this idea, as an individual's age and professional experience rise, her/his demands of her/his work tend to become more reasonable. A recent study found that job satisfaction was more significant in married people than in single people. Single people are unsure how to retain their employment and are unsure if they have chosen the professions they are presently working in for their entire lives or simply for a specific period. Depression is a frequent mental health condition that affects employee absenteeism and productivity. An analysis revealed that rising stress in work is linked with increasing insufficiency of functions (Bahadirli & Sagaltici, 2021). The pleasure and productivity of the individual might be affected by extreme stress.

### 2.3 Relationship between Depression and Job Satisfaction ( $H_1$ )

The COVID-19 is a severe risk, and because of this outbreak, the globe is in a dangerous position. Anyone who works as a primary caregiver has substantial stress since they have to deal directly with COVID-19 patients while working extra hours, must isolate themselves, and work at high risk. They are incredibly concerned about their relatives. Earlier studies in Iran revealed that 43% of nurses had a favourable relationship between nursing depression and job satisfaction (Hoboubi, A. Choobineh, Ghanavati, Keshavarzi, & A. A. Hosseini, 2017).

$H_1$ : Depression has a positive relationship with job satisfaction

### 2.4 Relationship between Anxiety and Job Satisfaction ( $H_2$ )

Dhaka Medical College's female nurses discover the risks of short-term and long-term health problems such as sleep disorders, depression, mental disorders, stress-related conditions, and general illness due to high workload levels, physical work, physical stress, emotional work, shifting, and other factors. Bangladesh's population-to-infant, bed-to-infant, and nursing ratios are, respectively, 5000:1, 13:1, and 2.5:1, unbelievably low by international standards. Due to coupled workload and child separation, female nurses are more likely to experience mental illnesses, including depression, anxiety, and stress. According to the survey, 65% of nurses have moderate to severe anxiety, whereas 35% have not (Aziznejadroshan, 2020).

$H_2$ : Anxiety has a positive relationship with job satisfaction

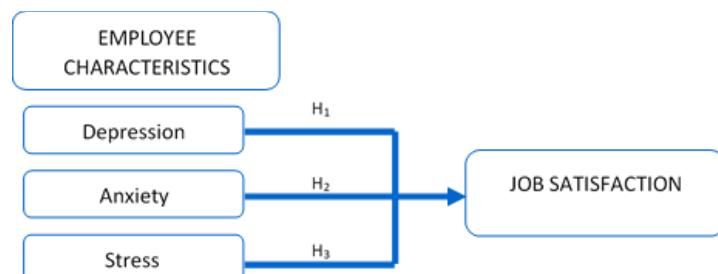
### 2.5 Relationship between Stress and Job Satisfaction ( $H_3$ )

The banking business in Pakistan became one of the fastest expanding industries, with new branches and innovative and competitive products being introduced every day. As a result, employees appear to be overworked and dissatisfied with the work environment in which they are placed. Furthermore, due to the demanding nature of the job and the inflexibility of working hours, the number of stress-affected personnel in the banking industry is steadily growing. This high-stress level causes low morale and decreased employee loyalty, destabilising their performance graphs and reducing employee happiness with their jobs. There is a link between occupational stresses such as workload, long working hours, and job performance (Health, 2020). However, few researchers such as Jamal (1984), Bahadirli & Sagaltici (2021) argue that job stress decreases employee motivation, decreasing their work-related job satisfaction. The purpose of this study is to determine the influence of workplace stress on job satisfaction among private banking personnel. This study evaluated the impact on employee satisfaction of stress variables, including the work environment, monetary rewards, workload, decision-making and managerial behaviour. The study's findings demonstrate that the working environment, monetary incentives, decision-making authority, and managerial conduct positively correlate with job satisfaction, proving our hypothesis (Bokti & Talib, 2009).

$H_3$ : Stress has a positive relationship with job satisfaction

### 2.6. Theoretical framework

The theoretical research framework in figure 5 shows the link between employee characteristics and their three dimensions with job satisfaction.



**Figure 5:** Conceptual Research Framework. (Source: Author)

## 3.0 RESEARCH METHODOLOGY

### 3.1 Research method

This study will use a quantitative technique to perform a descriptive cross-sectional study to investigate a relationship between job satisfaction and depression, anxiety, and stress in a carefully selected sample of people. The study population is the employee selected from executives, engineers, heads of a section, and department heads. Employees are selected as referring to Krejcie and Morgan table which 327 respondents out of 2,224 employees will be selected to answer through Google Form. The selection of respondents is from 8 Divisions and 33 Departments. All questionnaires will be adopted from previous research. In total there are about 8% of the total employees working in the factory. Data collected were categorized in terms of topics related to research goals, such as population, sampling methodology, sample size, study design, and effect size, using coding as one of the methods for analysing qualitative data (Akhtar, 2021). The findings were analysed and presented using descriptive statistics.

Four sets of questionnaires consist of Beck Depression Inventory (BDI-II), Generalized Anxiety Disorder 7-item (GAD-7), Perceived Stress Scale (PSS), and Job Satisfaction Survey (JSS). The Job Satisfaction Survey (JSS) has 36 items and nine subscales to measure employee attitudes toward their job and its many elements. Among the various work satisfaction measures, this one is well-known. The nine aspects of questionnaires focus on pay, promotion, supervision, benefits, contingent rewards, operating procedures, colleges, nature of works and communication (Gopinath, 2016)

The Beck Depression Instrument (BDI) is a 21-item self-report rating inventory that assesses depression-related attitudes and symptoms. Locke & Henne (1986) discuss common depressive symptoms. Data for this study were obtained by utilizing a Likert-type five-point scale with 1 indicate, strongly disagree, 2: not happy, "3: partially agree, 4: agree, and 5: Strongly agree.

GAD (Generalized Anxiety Disease) is a common but severe anxiety disorder marked by persistent, intense, and uncontrollable worry about everyday events or activities. Spitzer and colleagues developed the GAD-7, a seven-item scale for assessing and measuring the severity of GAD disorders in research and clinical settings (Journal, Ijbrp, & Haque)(2019) The Perceived Stress Scale (PSS) is a self-report questionnaire that measures how stressful people perceive their lives compared to their capacity to handle them (Lee, Kim, & Lee, 2019). The likelihood of gender discrimination in the PSS has yielded inconsistent results. According to (Cohen, Kamarck, & Mermelstein, A global measure of perceived stress, 1983), the questionnaire was designed for clinical populations and assumes respondents have a middle school education or above. The PSS-10 is completed on a Likert-type scale, with answer options ranging from 1 (Never) to 5 (Very Often), and total scores are

determined by reverse-scoring Questions 4, 5, 7, and 8 summing are across all ten questions (Cohen & Williamson, Perceived stress in a probability sample of the United States, 1988).

### 3.2 Data Analysis Method

The completed questionnaire will correspond with the data collected. Statistical data will be gathered and analysed using SPSS and LISREL software. Later, Cronbach Alpha will be the quantity from SPCC to identify an acceptable level of reliability. The reliable and acceptable value of Cronbach Alpha shall be between 0.6, and up to 0.8 is considered moderate, and if the ranges between 0.8 to 1.0 are considered very well (Taylor, 2015). A negative value describes something is wrong with the data and maybe forgotten to inverse score some items.

Respondent demographic data will be summarized in absolute numbers and percentages per gender group. To examine the variations between the groups and the associated mean scores for BD1-II, PSS, and GAD-7, probability values (p-values) need to be identified during this study.

A one-way analysis of variance (one-way ANOVA) with two-sided significance (p-value 0.05) will be performed. The p-value indicates if the correlation coefficient differs from 0 in a meaningful way. A coefficient of 0 shows that the connection is not linear. If the p-value is less than or equal to the significance threshold, the correlation is greater than or equal to 0

## 4.0 CONCLUSION

In summary, this conceptual study on employee characteristics that determine the depression, anxiety, stress, and job satisfaction among employees in the composite aerospace manufacturing industry will give benefit both parties. The three components of depression, anxiety, and stress will influence employee mental health, either directly or indirectly, affecting job satisfaction levels. Employee dissatisfaction has the potential to have a negative influence on the organization's internal and external relationships.

Those internal issues may give an impact to company such as absenteeism, insubordination, low productivity and quality, low morale and efficiency, high turnover, lack of desire, and declining physical and mental health. Under-motivated employees are less productive, and some may even become work slackers. The greater the impact, the lower the company's income and profit will be due to the leakages and deficiencies in the organization.

Low work satisfaction can significantly influence customers, and the aircraft wing assembly line may be forced to cease owing to late deliveries and poor product quality. As a result, this research study may help the organization develop risk mitigation and action plans for all employees who suffer from depression, anxiety, or stress. Aside from that,

measuring employee job satisfaction regularly is critical for ensuring that the company's goal and vision are met.

In conclusion, excessive levels of depression, anxiety, and stress have a major impact on employee lifestyle and health, resulting in poor business outputs.

## Acknowledgement

First, I thank Allah for the opportunity to pursue my master's in business administration. Dr. Nurhanan Syafiah Abdul Razak, the supervisor of my master's research proposal, deserves my heartfelt thanks. I've learned a lot since becoming a student of Dr. Nurhanan Syafiah Abdul Razak. She devotes a significant amount of time to teaching me how to write a paper, conduct a literature search, and write up my manuscript, as well as for the helpful comments, remarks, and engagement throughout the learning process of this master's research proposal. Furthermore, I'd like to thank everyone who helped me through this MBA project. Throughout the project, I am grateful for their aspirant guidance, invaluable constructive criticism, and friendly advice. I am grateful to them for sharing their honest and enlightening perspectives on a variety of project-related issues.

Many friends have helped to colour my life over the last two years. I'd like to thank all my colleagues in the MBA-CTRM programme, especially Wan Zulkharnain, Nor Azri and Masnita, who give full support and encouragement. Life as a part-time student is not ideal. Nonetheless, I am fortunate to have met some friends who inspire me to persevere in the face of adversity. Last but not least, I owe a debt of gratitude to my family members, particularly my wife and children, for their unwavering support and encouragement throughout my life. It is impossible for me to complete my graduate studies without their support.

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