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**THE IMPACT OF LEADERSHIP STYLES TOWARDS
INNOVATIVE WORK BEHAVIOUR IN THE
AUTOMATION INDUSTRY**

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UUM
Universiti Utara Malaysia

**MASTER OF HUMAN RESOURCES MANAGEMENT
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MAC 2023**

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BY

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UUM
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**Research Paper Submitted to the
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ABSTRACT

The purpose of this quantitative research paper "The Impact of Leadership Styles towards Innovative Work Behavior in the Automation Industry", is to look at the impact between leadership styles and innovative job behaviour in the automation industry. The leadership styles comprised of transformational leadership and transactional leadership. This study's respondents were 101 automation employees from Bukit Jelutong, Shah Alam, Malaysia. Statistical Package for Social Science (SPSS) version 26 was used to examine the data. Pearson's correlation and multiple regression tests were used in this study. According to Pearson's correlation result, transformational and transactional leadership have a correlation with innovative work behaviour. According to the multiple regression results, transformational leadership has no significant impact towards innovative work behaviour. Meanwhile, the results of transactional leadership shown a significant influence towards innovative work behaviour in the automation business at Bukit Jelutong. This research also demonstrated the practical implications, theoretical implications, and limitations encountered while performing this study, as well as some recommendations for future researchers interested in studying the impact of leadership styles towards innovative work behaviour.

Keyword: Innovative work Behaviour, leadership styles, transformational leadership, transactional leadership, automation industry

ABSTRAK

Kertas penyelidikan kuantitatif ini bertajuk Kesan Gaya Kepimpinan terhadap Tingkah Laku Kerja Inovatif dalam Industri Automasi. Penyelidikan ini dilakukan bertujuan mengkaji kesan gaya kepimpinan dan tingkah laku kerja inovatif dalam industri automasi. Gaya kepimpinan terdiri daripada kepimpinan transformasi dan kepimpinan transaksi. Responden daripada kajian ini terdiri daripada 101 pekerja automasi dari Bukit Jelutong, Shah Alam, Malaysia. Data dianalisis secara deskriptif dan inferens dengan menggunakan '*Statistics Package for Social Science*' (SPSS) versi 26. Ujian dijalankan dengan menggunakan korelasi '*Pearson*' dan regresi berganda. Daripada analisis korelasi '*Pearson*', dapatan kajian menunjukkan bahawa kepimpinan transformasi dan kepimpinan transaksi mempunyai hubungan dengan tingkah laku kerja yang inovatif. Bagi keputusan regresi berganda, keputusan menunjukkan kepimpinan transformasi tiada kesan yang signifikan terhadap tingkah laku kerja yang inovatif. Keputusan kepimpinan transaksi pula menunjukkan terdapat kesan positif dan signifikan terhadap tingkah laku kerja inovatif dalam industri automasi di Bukit Jelutong. Penyelidikan ini juga menunjukkan implikasi praktikal, implikasi teori, limitasi semasa menjalankan kajian ini dan mengemukakan beberapa cadangan bagi kajian akan datang untuk mengkaji kesan gaya kepimpinan terhadap tingkah laku kerja yang inovatif.

Kata Kunci: Tingkah laku kerja yang inovatif, gaya kepimpinan, kepimpinan transformasi, kepimpinan transaksional, industri automasi

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LIST OF ABBREVIATION

Abbreviation	Meaning
IWB	= Innovative Work Behaviour
R&D	= Research and Development
GII	= Global Innovation Index
MRANTI	= Malaysian Research Accelerator for Technology & Innovation
4IR	= Fourth Industrial Revolution
GDP	= Gross Domestic Product



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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Technological advancements alter how employee produce goods and provide services to others. Today's global market conditions make cutting-edge innovation a vital component of any modern corporation's approach to operate business. The ability to innovate is essential to the continued success of organisations and national economies. National economies must demonstrate leadership in the development and adoption of particular technologies in order to stay competitive on a global basis. A competitive advantage requires innovative operations (Janjic & Radenovic, 2019).

With increased competition, automation industry must react quickly and continuously innovate. Implementing innovative working methods is critical to the long-term sustainability of automation. Businesses have always embraced innovation as a strategy of staying competitive in an ever-changing economic market (Ahmed, Ata & Elhamid, 2018). Organisations that refuse to adapt to changing circumstances are doomed to be the ones that bring about the demise of existing businesses. Each organizational member (not only research and development experts) may produce innovative ideas and collaborate to execute those that make sense in each work setting, so contributing to collective innovation.

Dagan, Rafi, Yen, and Dilla (2021) mentioned the practise of innovativeness reveals that rapid innovators who capture new markets while preserving old ones have an edge. Based on a thorough evaluation of the amount and nature of the change

brought about by innovative behaviour, organisations may decide to develop and implement either radical or gradual innovations. Incremental innovations are defined as little enhancements that may be demonstrated as solutions to challenges when the aim is apparent or identifiable. In contrast, the outcomes of radical innovations are entirely new products or processes, where the research path is known but the conclusion is unpredictable. With technological upheavals and the present state of the globe, corporate players must emphasise innovative work behavior in order to keep up with the times. There is a need for innovation in order to provide answers to present and future issues.

In terms of the automation sector, Malaysian Investment Development Authority (2022) mentioned that worldwide businesses have been upended since the pandemic's spread, emphasising the necessity for automation as governments and corporate leaders focus on reviving the sagging economy. Adopting automation for low-cost technological solutions is now essential for firms to succeed in the post-pandemic economy. So, it is essential that the organisation's staff displays innovative work behaviours. Automation has the ability to vastly increase industrial output while simultaneously decreasing expenses.

Based on latest report from Global Innovation Index (GII) in 2022, Malaysia is now rated 36. However, according to Malaysian Research Accelerator for Technology and Innovation (2022), Malaysia's objective is to be ranked among the top 20 most inventive nations in the GII by 2030. Hence, the innovative work behavior in Malaysia still needs to be sharpen to achieve its objective. The Malaysia Knowledge Economy Study found that a nation's per-capita gross domestic product (GDP) increased by 0.36 percent for every one percentage point increase in its

innovation potential (MRANTI, 2022). An increase in innovative production may add USD 1.21 billion (RM5.06 billion) to our GDP of USD 336 billion, but then again, the 12th Malaysia Plan recognises innovation as a significant facilitator of economic growth.

National Fourth Industrial Revolution (4IR) Policy (2021) emphasises focus and helps influence the ways in which technology and society interact and benefit one another. The purpose of the National 4IR Policy is to facilitate the use of innovation. The National 4IR Policy will employ technology adoption and innovation to coordinate the action plans and activities of many ministries and organisations in order to guide the nation towards a responsible, balanced, and sustainable development. As a result, it is critical that the country actively pursue technological innovation for the foreseeable future. In addition to safeguarding the environment and guiding society toward a brighter future, the next wave of technical advancements promises to greatly increase our ability to operate efficiently and effectively via technology. However, the government cannot shoulder all of the responsibility for the project. Organizations and their leaders must also do their share.

1.2 Problem Statement

The focus of this research is to study the impact of leadership styles towards innovative work behaviour in the automation industry. The primary concern is innovative work behaviour that known as dependent variable. Innovative work behaviour may be influenced by different leadership styles. There are two main styles of leadership to consider: transformational and transactional.

Dysart (2019) suggested that a deeper knowledge of the relationship between leadership style and innovative work behaviour may result in enhanced business operations within an automated environment. Flexibility and innovation are essential skills in a technologically evolving industry. With the persistent fiscal restrictions, it will be critical for staff to concentrate their efforts on promoting innovative methods that maximise the effect of existing monies. McCann and Sparks (2019) explained that future success in the automation industry will depend on leaders gaining the skills necessary to serve as transformational catalysts. As a technique of resolving intricate monetary problems and better serving existing clients, maintaining a competitive edge requires business leaders to get the most out of their company's resources, both financial and human.

Faraz, Raza, and Ahmed (2018) mentioned that the rapid pace of change brought forth by globalization has not spared Malaysia. Customers now have access to an unprecedented abundance of data, greatly increasing the complexity of their requirements and the scale of their desired pleasure, and new rivals are emerging in the automation business in tandem with the growth of technology or Industrial Revolution 4.0. Since of this, businesses felt compelled to explore all avenues for encouraging this kind of conduct because it was seen as the only way to guarantee the continuity of the company. They said that businesses either had to adapt to survive, which included encouraging people to bring new ideas to the workplace, or they risked going out of business. Employees that are unable to think beyond the box are one of the reasons why so many firms struggle to achieve their strategy and as a result, fail to meet their objectives.

In research from Shah, Shah, and El-Gohary (2022), innovative workplace behaviour has become a pressing concern for many businesses, as employees now need to take the initiative to solve increasingly complex problems at work that are neither part of their job descriptions nor explicitly within their purview of responsibility. The emergence of this risk is attributable to the widespread acceptance, throughout time, that innovative endeavours are fundamental to business development and the achievement of long-term success. Consequently, it became imperative for businesses to train their leaders to inspire their staff to think critically about the status quo rather than just carry out their jobs as usual.

Furthermore, with the need to be a developed country, Malaysia should encourage its citizen to have innovative thinking to be in par with other developed countries. The goals to achieve Top 20 in GII also can be realised with innovative work behavior. Dysart (2019) study shows that although there is evidence connecting leadership styles to innovation, it is unclear which leadership styles are best at inspiring original thought and action. It became theoretical that a certain kind of leadership is more likely to inspire innovative work behaviour, although scholars have reached different conclusions on the strength of this link. Given the importance of innovation to a company's future success, it makes sense to investigate how leadership styles inspire innovative problem solving on the job. This study aimed to determine how various leadership styles affect workers' inclination to be innovative (Dysart, 2019). On the other hand, in current situation of post-pandemic, there are many changes occurring in the workplace especially for automation industry. Thus, this study can provide on what kind of leadership styles can affect innovative work behavior in automation industry.

Despite the abundance of literature on the topic, researchers should dig into the ways in which leadership affects employees' innovative work behaviour in post-pandemic era. Leadership is a key factor in determining whether or not employees are innovative on the job (Waruwu, Asbari, Purwanto, Nugroho, Fikri, & Fauji, 2020), and research shows that different types of leadership can either foster or stifle firms' culture of creativity and originality. This study offers the possibility to discover the most crucial styles of leadership that substantially promotes innovative work behaviour. Despite the fact that transformational leadership theories have emphasised the importance of promoting innovation as a critical function for leaders, there is much debate in the leadership literature about transactional leadership's inability to inspire innovative work behaviour on the part of employees. While some studies have identified a beneficial relationship between transformational and transactional leadership and employees' innovative work behaviour, others have found the contrary. Nevertheless, whether the conclusion is still applicable in the present condition and environment will be investigated further in this study. Additionally, given the disparities in results, it is crucial to identify plausible causes for the variances. As a result, the purpose of this research is to investigate the impact of leadership styles towards innovative work behaviour in the automation industry.

1.3 Research Questions

The following research questions have been devised to gain a better understanding of the impact of leadership styles towards innovative work behaviour in automation industry.

- 1) Is there any correlation between transformational leadership and innovative work behaviour in the automation industry?
- 2) Is there any correlation between transactional leadership and innovative work behaviour in the automation industry?
- 3) What is the impact of transformational leadership towards innovative work behaviour in the automation industry?
- 4) What is the impact of transactional leadership towards innovative work behaviour in the automation industry?

1.4 Research Objectives

The objective of this research is to investigate the influence of leadership styles on innovative work behaviour in the automation industry. The following are the study's specific objectives:

- 1) To assess the correlation between transformational leadership and innovative work behaviour in the automation industry.
- 2) To assess the correlation between transactional leadership and innovative work behaviour in the automation industry.
- 3) To investigate the impact of transformational leadership towards innovative work behaviour in the automation industry.
- 4) To investigate the impact of transactional leadership towards innovative work behaviour in the automation industry.

1.5 Significance of the Research

This investigation is poised to add to the existing body of knowledge on both leadership styles and innovative work behaviour. Furthermore, it can provide empirical evidence about the connection between leadership styles and innovative work behaviour in the automation industry.

The study's practical value lies in its identification of employee actions that are most likely to contribute to a company's long-term sustainability through innovative work behaviour. This will guide the leader towards the leadership styles most suited to inspiring innovative work behaviour. Leadership styles are becoming increasingly significant in today's businesses, particularly when it comes to fostering innovative work behaviour among staff members. The potential influence of automation on applied innovation arises from its flexibility in the face of a changing environment. This study's results will help determine whether or not this assumption is right. Therefore, fostering a culture of innovation at work has become a crucial area of focus.

1.6 Scope and Limitation of Study

This research will only include those who work in one automation company at Bukit Jelutong, which is located in Shah Alam, Selangor, Malaysia. The finding is not capable of being extrapolated to any other professional or institutional setting. When the research design is considered, it is clear that this particular study cannot provide any kind of causal assertion. It is only going to be possible to comprehend how the variables are associated with one another, rather than establish that connection.

1.7 Definitions of Key Terms

1.7.1 Leadership Styles

Leadership styles was described by as the pattern of conduct that a leader demonstrates while dealing with individuals they influence (Dysart, 2019).

1.7.2 Transformational Leadership

Bass (1985) defined transformational leadership as great leadership performance and engage in constructive between the leader and the workforce, since any link must stimulate vision-driven change in followers, go beyond short-term goals, and focus on higher order intrinsic subordinate requirements.

1.7.3 Transactional Leadership

Faraz *et al.* (2018) defined transactional leadership as transactional agreement between a superior and subordinate that spell forth the duties of the former and the rewards to be gained by the latter for carrying them out successfully.

1.7.4 Innovative Work Behaviour (IWB)

Innovative work behaviour in the framework of a job, a team, or a company refers to actions taken by individuals with the goal of creating and implementing novel and useful solutions to problems (Al-Omari, Ling, & Mohd Ali, 2019).

1.7.5 Automation Industry

Automation industry is the company incorporate of machines to accomplish jobs that were formerly performed by humans or tasks that would otherwise be impossible (Jadhav & Gawande, 2020).

1.8 Organisation of Dissertation

This introductory chapter addresses the study's background, a summary of the problem, research questions, and research objectives. The second chapter will perform a review of the research on leadership styles and innovative work behaviour. The third chapter will go through the techniques and instruments used in this study, as well as how the questionnaire was distributed. The methods used to analyse the data acquired are detailed in Chapter 4, as are the overall conclusions of the study. The last part, Chapter 5, discusses the findings and recommendations for future research and management techniques.

CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction

In this chapter, a comprehensive literature review of each variable was conducted, starting with the dependent variable (innovative work behaviour), and continuing on to the independent variables (transformational leadership and transactional leadership), and the relationship between innovative work behaviour and leadership styles. This chapter summarises significant discoveries made by earlier researchers and provides a more in-depth understanding of the study variables that were investigated by means of a conceptual framework.

2.2 Definition and Concept of Innovative Work Behaviour

Previous studies have presented several alternative definitions of innovative work behaviour in the workplace. As defined by Al-Omari *et al.* (2019), innovative work behaviour refers toward actions taken by individuals with the intention of creating and distributing innovative and beneficial ideas, products, procedures, or processes inside a certain role, team, or organisation. Thereafter, Kmiecik (2020) outlined the ways in which innovative methods of doing work are connected to a variety of different theories that have received scholarly attention. Consistent with the definition, which argues that innovative work behaviour is interrelated to inventive job performance, innovativeness in employees, and innovation in the workplace.

Later, Sudibjo and Prameswari (2021) defined innovative work behaviour as the use of specialised knowledge and skills to the creation of innovative and valuable enhancements. In light of this, Kaymekci (2022) defined innovative work behaviour as the whole of an organization's operations aimed at developing, distributing, and executing a viable innovation. When an individual makes use of an innovative work behaviour, they go above and beyond the requirements of their job to develop and supply their organisation with new services, products, and procedures. Kaymekci agreed with Sudibjo and Prameswari's definition that employees engaging in innovative work behaviour go above and beyond their typical job duties by exploring new technology, advocating innovative approaches to completing tasks, implementing cutting-edge practises, and securing funding for their innovative ideas. In other words, they go above and beyond what is expected of them in their jobs.

According to research of Van Assen and Caniels (2022), the primary difference between creative and innovative work behaviour is that the former entails putting new ideas into action, whilst the latter concentrates on the production of new ideas. New idea generation is the only domain in which innovation may be exercised. Therefore, innovative work behaviour encompasses both work behaviours aimed toward creativity as well as work behaviours focused for implementation. Innovative work behaviour calls for proactive and encouraging behaviour, although this requirement is conditional on the specific innovation stage and the problems associated with it.

Mansour, Dalain, Al Zeaideen, and Masadeh (2022) explained each level needs a particular set of skills in order to be completed successfully. For instance, the ability to generate new ideas requires better cognitive talents, but the ability to spread

such ideas requires social abilities. The process of engaging in innovative work behaviour is complicated by the fact that the processes stated above are not always sequential; rather, they may occur concurrently. Companies put forth extra effort to foster employees' innovative attitudes and actions on the job due to the great value placed on such traits. It is indeed good for the business and its employees alike. Employee happiness and output both rise when employees are able to think beyond the box. Yet, innovative work behaviour has been associated to innovative performance in a company.

As per Vuong, Tushar, and Hossain (2022), employees' innovative work behaviour increases the innovativeness of hierarchical organisations by generating innovative processes, commodities, and services. Innovative work behaviour is defined as that which strives to originate and implement novel and beneficial ideas, techniques, products, or processes. Adopting a new concept in one's profession, a group setting, or an organisation with the objective of enhancing procedures, products, or tactics is an example of innovative work behaviour. Because of the rapid rate at which technology is evolving and the growing range of tasks, employees are required to acquire knowledge that is relevant to their jobs or wider domain competence. Employees thus encounter a skills gap as a result of this, which might be alleviated by innovative workplace behaviour.

McCann and Sparks (2019) stated that innovative work behaviour is more than just being innovative, since it also includes seeking out new possibilities, conceiving up innovative ideas, advocating for those ideas, and taking the lead in seeing those ideas come to fruition. With regards to the four dimensions brought up in McCann and Sparks (2019) research, Erhan, Uzunbacak, and Aydin (2021) provided some

further context. Innovative work behaviour was broken down into its constituent parts, which they called idea exploration, idea generation, idea championing), and idea implementation.

Erhan *et al.* (2021) define concept exploration as the process of looking for or discovering something that has not yet been uncovered. Because organisations in transition are expected to accommodate the demands of all stakeholders, they must be adaptable to new developments and capable of analysing situations from distinct viewpoints. Because of this, it is essential to maintain the practise of concept inquiry. Because creativity is a prerequisite for innovation, it is essential for organisations to have leaders who are inventive in their approach or who actively foster an environment that is conducive to the exploration of innovative ideas in their staff. In order to build a culture of idea exploration, it is essential to have employees led by leaders who are able to concentrate on new ideas and make an effort to expose their own fresh ideas in order to support the goals of the firm. In other words, the organisations that allow their employees to freely submit new ideas and approaches to solving existing issues are the ones that are most successful. When employees at a company believe that the decisions made by their leaders are the only ones that matter and cannot be questioned, this can be detrimental to the process of idea exploration among workers.

Erhan *et al.* (2021) also defined idea generation as the recurrent series of actions that link capturing, sharing, and recoding ideas. As businesses embrace transformation in any sphere, they must all demonstrate a willingness to adapt. Its adaptability allows for and promotes innovation, which leads to increased productivity within an organisation. Businesses that successfully adapt to change in

any field also tend to have a culture that welcomes and embraces new ideas and approaches. Battistelli, Odoardi, Cangialosi, Di Napoli, and Piccione (2021) further interpreted idea generation. The phase known as idea generation entails the process of coming up with concepts that are novel, or at the very least novel in relation to the environment in which they will be applied. Organisations are being pushed to offer goods or services that are both innovative and competitive in order to meet the needs of ever-changing client preferences. In a shorter amount of time, coming up with solutions that are both adaptable and inventive has proven to be a more difficult challenge. As a result, the ideas materialise in response to both the anticipated and unanticipated shifts.

Erhan *et al.* (2021) further outlined the third component of innovative work behaviour as the active promotion of an innovative notion, as well as the vital capability to bring ideas into practise by persuading allies. Apart from that, champions and leaders that demonstrate an incredible degree of confidence in themselves and gain the commitment of others to embrace the innovation are essential in an ever-changing environment. In addition to having leaders who are capable of developing new ideas, staff must push for new technologies in order to guarantee that innovative opportunities are not lost. Employees are seldom assigned official jobs to carry out completely fresh recommended ideas; as a result, employees come up with those ideas on their own to support the organization's goals. Employees will embrace the leaders' lead and be excited to be a part of this digital transformation if the leaders demonstrate that digitalization is required to stay up with emerging technology.

The idea execution was the last stage of the innovative work behaviour which was outlined by Erhan *et al.* (2021). According to them, innovative work behaviour

takes place when the idea championing phase has been successful in convincing the employees and allies of the value of the concept. Idea implementation is the process of putting an idea that was championed into action. The new concept may finally begin to be put into action when it is recognised and valued by other members of the company. This is when the execution of the idea is met with excitement. It is at this point that the journey comes to a completion, and it is often considered to be the pinnacle of the innovation process. This is due to the fact that merely having an idea that has been accepted by others does not guarantee that the concept will be implemented. As a result, the outcome or output of innovative behaviour at work is the execution of the ideas. However, this procedure has been regarded to be the ultimate phase in the innovation process. Employees are supposed to acquire accustomed to the new goods and services, culture, and to be excited about becoming a part of the innovation process.

However, instead of four phases, Ahmadi, Susanti, and Irfan (2022) emphasised that at the employee level, innovative work behaviour describes creativity, which involves three crucial stages: idea generation, idea promotion, and idea implementation. When people generate new ideas or possibilities, they are participating in the "idea generation" stage of the innovative approach. The goal of idea promotion is to reduce opposition to change and remove barriers to implementation inside an organisation, making it simpler to bring up and implement the ideas being championed. As a final phase, "idea realisation" entails translating a concept into action and contributes to the production of new goods, services, and methods of working. A four-stage model of inventive behaviour at work will be used in this study as covered by McCann and Sparks (2019) and Erhan *et al.* (2021) instead

of three phases because the coverage from Ahmadi *et al.* (2022) is not wide and details as McCann and Spark (2019) and Erhan *et al.* (2021).

Al-Omari *et al.* (2019) provide the key definition of innovative work behaviour that will be used in this study which the framework of a job, a team, or a company refers to actions taken by individuals with the goal of creating and implementing novel and useful solutions to problems.

2.3 Studies on Innovative Work Behaviour

An abundance of empirical research uses innovative work behavior as a dependent variable. It is the variable that depends on other factors that will change as a result of the independent variable manipulation. Referring to Zhang, Abdullah, Hossan, & Hou (2021) studies, scholars have been researching the discipline of innovative work behaviour for the past two decades since it assists in the spread of innovation throughout a corporation as a whole. The factors that encourage innovative work behaviour have been found via a systematic literature study. Further investigation from previous research into these elements indicated that they are connected to leadership styles, organizational context, and personal qualities. In addition, leadership, work groups, and individual qualities are the three primary elements that have been presented by Mutonyi, Slatten, and Lien (2020) as being the primary contributors to employees' innovative work behaviour.

Palladan (2018) conducted research to investigate the impacts of cyberloafing activities on innovative work behaviour. Then, Venkatesamy and Lew (2022) studied the consequence of intrinsic motivation on employees' innovative work behaviour. They

also investigated the impact of organisational support on innovative work behaviour. Botha and Steyn (2022) investigated the impact of employee voice on innovative work behaviour as the dependent variable. They did so because they were interested in the relationship between the two. In addition to that, Mansour *et al.* (2022) conducted research on the effect that job crafting has on the innovative behaviour of employees.

Following that, Saeed, Ahmad, and Jasimuddin, (2022) investigated the connection between sense of curiosity and innovative work behaviour. Intrinsic motivation is linked to knowledge workers' innovative job behaviour. Knowledge workers' innovative work behaviour is positively related with organisational support for innovation. As a result, of the numerous elements that potentially influence innovative work behaviour, this research would want to focus on leadership styles.

2.4 Leadership Styles

Dysart (2019) quoted from Bass and Bass (2008) that leadership style was described by as the pattern of conduct that a leader demonstrates while dealing with individuals they influence. It is a succession of patterns and behaviours that are demonstrated by the leader in reaction to the activities of the followers. In various situations, followers engage in interactions with other people while emulating the actions of their leader. It may be shown by actions that stimulate engagement from workers, which ultimately leads to work towards company's objectives.

Jengre and Mogre (2019) also defined leadership style as the manner in which leaders carry out their leadership responsibilities. One might consider this to be a

particular behaviour that a leader in a company will engage in so as to push people towards the accomplishment of a particular goal that has been established for the business. There are several definitions of the term "leadership." In other words, the individuals achieve a comprehensive comprehension of this idea from a variety of vantage points. This is because the environment of the leaders is always shifting, as they take on new tasks, perform new duties, and operate in new locations.

The notion of leadership is one of the most researched organisational phenomena by academics, and it is widely accepted as the primary driving factor behind the growth of organisations. Berraies and Zine (2019) mentioned leadership is a complex phenomenon in which leaders affect their followers' behaviours and attitudes while also directing and mobilising them to accomplish set objectives.

There are several theories of leadership style theories such as transactional or management, transformational or relationship, contingencies or situational, the great man, trait, style and behaviour and process theories. Uslu (2019) quoted from Carlyle (1847), the heroes' main fascination is that "universal history, the history of what man has done in this world, lies at the bottom of the history of the great men who have laboured here," as stated by proponents of the great man theory. This is due to the fact that "universal history" refers to the chronicle of human progress across the ages. According to Carlyle's "great man hypothesis," heroic potentials are innate, and only certain types of people may rise to the position of leadership. According to him, only such folks had the potential to achieve greatness. He believed that exceptional people did not emerge from nowhere but were rather born that way. The theory of leadership has progressed from the notion that certain people are born to lead and others are

destined to follow them into a more nuanced examination of the qualities that suggest future success as a leader.

Next, Uslu (2019) described trait theories of leadership as the view that one's ability to take on a leadership role depends on a predetermined set of traits and characteristics that are present from birth. Personality qualities, physical features, intellectual prowess, and so forth might all fall under this category. Then, using Greenleaf (1977), he explained how the contingency or situational theory demonstrates there is no one correct leadership style. Instead, it argues that the characteristics of the followers, the context in which the leaders find themselves, and other such variables determine the sort of leadership that is most effective.

According to Uslu (2019), the style theory recognises the importance of certain essential leadership skills that enable a leader who undertakes an act by drawing parallels with the leader's previous capacity prior to that deed, and by implying that each individual has a distinct style of leadership with which he or she is most satisfied. This theory is part of the larger field of style and behaviour theory. The same way that one size does not fit all, a single approach will not work in every circumstance. Next, by referring to Yukl (1989), in contrast to employees under autocratic bosses, those under democratic ones are more likely to be happy in their jobs, come up with innovative solutions to problems, put in long hours even when their boss is not around, and feel more connected to their superiors. It used to be that only when leading a group of very skilled and dedicated veterans was laissez-faire leadership taken seriously.

On the other hand, King (1990) investigated leadership behaviour theorist. The first way to look at behaviour theory is that the leader cared for the group as a whole and knew each member well, even as they prioritised getting the job done. Factor analyses were the backbone of behavioural research throughout its formative years (Johns & Moser, 1989). Famous leadership ideas Theory X and Theory Y both originated from this premise. As far as Theory X was concerned, everyone hated their jobs, everyone needed to be micromanaged, and everyone would choose job security over responsibility. As contrast to Theory X, Hypothesis Y was completely at odds with it (King, 1990). In addition, according to King's (1990) Theory Y, most employees genuinely like their professions; most individuals are intrinsically driven and don't require external motivation to work hard; and most people are eager for responsibility and welcome it. A substantial amount of study has been undertaken on behaviour theory and these research' findings were not always congruent with these beliefs.



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Subsequently, Fiedler and House (1994) offered two alternative leadership models which prioritise performance. Consideration (concern for people and relationship behaviours) and early structure (concern for production and task behaviours) were considered to be crucial attributes. A leader's capacity to create rapport and trust with his team members is a key component. The beginning structure demonstrates the extent to which a leader establishes, leads, and defines his or her own and subordinates' duties in contributing to organisational success, profit, and mission fulfilment. Leaders have been classed into three basic groups by researchers: autocratic, democratic, and laissez-faire. The authoritarian leader makes choices without consulting his followers, the laissez-faire leader defers to his followers and so

performs no meaningful leadership obligations other than accepting the job, and the democratic leader consults with his followers before making decisions.

After that, Uslu (2019) described process-focused leadership concepts include servant leadership, principal-centered leadership, learning organisations, and transformational leadership. Uslu (2019) also claims that each year brings even more. Greenleaf established the concept of servant leadership in the early 1970s. These and other emerging theories of leadership emphasise the importance of leaders making positive contributions to the lives of those around them. In the study of leadership, an evident pattern of growth has developed. Since its commencement, the study of leadership has managed to evolve from an emphasis on innate abilities and inherent rights to one that emphasises learned skills and styles, relationships, group dynamics, and most notably, group member communication with an aim towards bolstering individual and institutional ethics.

The next emergent of leadership theories are transactional and transformational leadership. Uslu (2019) stated in his research that transactional theory related contingent-reward leadership that encouraged and rewarded followers for meeting goals. When it comes to transformational leadership, it differs from other models since it includes followers in internal organisational processes or activities.

Defining the differences between transactional and transformational leadership is a major topic of research in the field of leadership studies. Although transformational theories have been a central focus of leadership studies, transactional leadership provides the theoretical grounding for these studies, and the two approaches do not necessarily compete head-on. Consequently, the theory of Burns

(1978) and Bass (1985) was used in this study, with a focus on transformational and transactional leadership approaches. In actuality, this notion is widely accepted as a key principle upon which the vast literature on theoretical reasoning is founded. In light of this, the transformational and transactional leadership styles will constitute as the focus of this study's analysis.

For the key definition of leadership style, this study would define it as the pattern of conduct that a leader demonstrates while dealing with individuals they influence (Dysart, 2019).

2.4.1 Transformational Leadership

James V. Downton (1973) is acknowledged with having the idea that would later become known as transformational leadership. In 1985, a scholar by the name of Bernard M. Bass added methodologies for evaluating the efficacy of transformational leadership, further refining the concept. Hence as stated by Bass (1985), the dynamics of transformational leadership include a strong personal connection with the leader, engaging in on a shared vision of the future, or transcending beyond the self-interest exchange of incentives for compliance. These are all examples of how transformational leadership can be demonstrated. Effective transformative leadership requires all three of these traits. The capacity to inspire their followers to look beyond their immediate needs and pursue the group's goals, vision, and purpose is a trait that is shared by transformational leaders. These leaders are able to make a positive impact on the people they lead.

Hater and Bass (1988) adds that transformational leaders exhibit excellent leadership performance and engage their teams in meaningful dialogue. The purpose of this communication is to motivate employees to adopt a new way of thinking that is motivated by the leader's vision rather than by immediate requirements or concerns. A transformational leader inspires their entire team, motivates them to go above and beyond to achieve the company's goals, and convinces them to sacrifice their personal ambitions for the greater good of the team. Among the many leadership theories, transformational notions have zeroed in on how leaders might affect change in their followers and their organisations.

Harlianto and Rudi (2018) provided further definition of transformational leadership by stating that it is something that has the ability to impact the innovative behaviours of its followers, which in turn will assist those followers in realising their corporate goals. It is the leaders that are able to alter their organisations think beyond their own requirements and the requirements of the people they lead. This approach to leadership raises the bar for both leaders and followers, with the goal of realising the leadership style's maximum potential.

Holt (2018) provided support for their ideas by stating that transformational leadership styles, which are characterised by attributes like as honesty and integrity, are well-suited to achieving the ambitions of the millennial generation. This provided more evidence that their ideas were correct. On the other hand, Charoensukmongkol and Lamsam (2022) explained about characteristics of effective leaders who make a difference. The four main characteristics of transformation leadership are idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration.

In conclusion, for the purposes of this study, Bass (1985) gives the most applicable definition of transformational leadership. According to him, transformational leadership was defined as excellent leadership performance and a meaningful engagement between the leader and the employees because any relationship must foster vision-driven transformation in followers, go beyond short-term targets, and focus on higher order intrinsic requirements of subordinates.

2.4.2 Transactional Leadership

In 1947, Max Weber first defined the traits of the transactional leadership style. Thereafter, MacGregor Burns worked to perfect this idea even further. Later, in 1981, Bernard Bass provided further detail on these traits. The transactional leader model is used to the leader-subordinate dynamic in order to draw conclusions. Leadership is centered around cost-benefit analysis and bargaining between a leader and their staff in order to achieve organizational through incentives and penalties.

Kabeyi (2018) explained that employee may always expect something in return for following a transactional leader. It might be anything from a positive evaluation to a pay increase, a promotion, or even a switch of roles. They are skilled at bargaining in ways that inspire and that may benefit a business. Transactional leadership, often called managerial leadership, is concerned with the management, coordination, and performance of a group.

Then, Faraz *et al.* (2018) further defined transactional leadership as a mutual contract, agreement, or pact between a leader and an employee. The fundamental objective of this style of leadership is to define clearly what is expected of

subordinates and to provide incentives in return for excellence performance. The quality of the connection that exists between superiors and those they supervise is contingent on the advantages enjoyed by both parties. Purwanto, Bernarto, Asbari, Wijayanti, and Choi (2020) also holds up Faraz *et al.* (2018) definition by mentioning that to motivate followers by appealing to their individual concerns is central to the concept of transactional leadership, which describes the process. It is possible for a transactional leadership style to include values, but those values must be pertinent to the transactional processes at hand, such as honesty, accountability, and reciprocity. According to Fithriany, Sandi, Anton, and Farid (2020), in a transactional leadership structure, subordinates accept, obey, or agree to do what their superiors say in exchange for some kind of remuneration or protection from taking any acts that might hurt the organisation. Efforts like this are made to safeguard the company against harm-causing behaviour.

In a nutshell, the key definition of transactional leadership in this study would be referred to Faraz *et al.* (2018) as it is a mutual contract, transaction, or agreement between a leader and follower to define clearly what is expected of subordinates and to provide incentives in return for excellence performance.

2.5 The Relationship between Leadership Styles and Innovative Work Behaviour

The objectives of this study are to investigate the relationship between transformational and transactional leadership towards innovative work behaviour.

2.5.1 The Relationship between Transformational Leadership and Innovative Work Behaviour

According to Yang and Yang (2018), transformational leadership amid upper-level management has been linked to innovative practises in the workplace in the past. Academic articles investigating how transformational leadership influences employees' tendency to participate in innovative work behaviour have shown diverse results, ranging from the discovery of a positive link to the reveal of a negative one. Businesses with transformational CEOs, for instance, were shown to have a better chance of effectively engaging in process innovation. This was proven true even after taking into account a variety of other variables. In a study with similar findings, Chen, Sharma, Zhan, and Liu (2019) discovered that transformational leadership encouraged innovation, which played an essential part in improving corporate performance.

Chen *et al.* (2019) also explained that transformational leaders motivate their teams to put aside narrow self-interests in favour of the company's overarching goals. They inspire others by talking about their dreams, pique their interest with their enthusiasm, dispel myths with their tenacity to create a better future, and question accepted norms by asking whether they are still relevant in the modern world. Transformational leaders need to have the ability to articulate a clear vision that inspires their followers to accept change, strengthen their feeling of personal agency, and build the confidence to attempt something new. A vital aspect of a transformational leader's role is to question the status quo and help individuals of the firm adjust to changing conditions.

In research from Yang and Yang (2018), leadership that exemplifies change and challenge may go a long way towards convincing employees of the societal value

of innovation. They motivate group members to question tried-and-true plans that cannot adapt to shifting conditions and instead choose for a path that ventures into uncharted technological and economic territory in an effort to capitalise on uncertainty. This occurs during the process of strategic decision-making. Additionally, transformational leaders provide a favourable environment by means of a cascading effect, which encourages the creativity of companies.

Molodchik, Jardon, and Yachmeneva (2020) added more knowledge on their research that the market expertise and vision of transformational leaders give guidance to employees regarding the evolving technological landscape and the requirements of their respective customers. Organisations need to educate themselves on cutting-edge manufacturing techniques and technology in order to foster technological innovation. Transformational leaders may inspire and compel people to support technological development by effectively communicating a vision of innovation to their employees. Intellectual stimulation and supporting conduct on the part of a transformational leader are two factors that boost workers' interest in and capacity to conceive of new approaches to address difficult technological issues. Innovation calls for employees to consistently reflect on their work and learn new things, which leaders should encourage through empowerment, encouragement, and trust. Thus, employees will be able to pool their expertise for the greater good of product development and the implementation of innovative, yet cost-effective, approaches to the creation and distribution of cutting-edge technological advances.

Similarly, Wang and Li (2020) looked at the link between transformational leadership and innovative work behaviour in Chinese businesses. The study concluded that there is a positive correlation between transformational leadership and

employees' propensity to use innovative solutions to their job. This matched the results of Barchiesi and La Bella (2020), who studied the link between inspirational management and innovative productivity in Italian small and medium-sized company. Their findings of the research also found out that transformational leadership is favourably associated to Italian SME workers' innovative work behaviour.

Zhang *et al.* (2021) discussed that effective leadership is the primary factor that can be credited for the implementation of innovative work behaviour in today's organisations. Intellectual stimulation is one quality that transformative leaders possess in this respect. They promote unique methods of thinking as well as work settings that promote innovation in order to obtain current knowledge and cutting-edge technology. They suggested that these heads of state craft an evolving organisational vision, which is crucial for effecting a change in cultural values that more accurately reflects the enhanced inventiveness of the employees. There has been a lot of talk about how managers might inspire innovation in their employees by adopting a transformational leadership style.

Referring to the top tier theory, Rasheed, Shahzad, and Nadeem (2021) mentioned that leadership skills of a company's top management have a major bearing on the company's long-term viability and growth. As an added bonus, transformative leaders may have a hand in creating, adopting, and enforcing innovative processes and tools. A transformational leader will formulate and implement a shared vision for the organisation that illustrates how it will differentiate itself in the market. In addition, it encourages consumers to share their ideas for how to improve the overall quality of the experience they receive from the company by bringing fresh ways in the form of goods and services. Motivating others via words helps a company's staff see the range

of strategic options accessible to them and accept the challenge of creating and distributing innovative products and services to the market. Transformational leaders inspire their teams to seek out and capitalise on opportunities to develop and deliver products and services that go above and beyond the expectations of their customers. They do this through providing intellectual stimulation to workers, which in turn helps employees improve their inventive capacities and habits.

Transformational leadership have four dimensions that can be linked with innovative work behaviour. Okoli, Nnabuife, Adani, and Ugbo (2021) claimed that the idealised influence is the most critical of these four factors. To begin, transformational leaders have an innate ability to exude charm. This quality of transformational leaders inspires a desire in their followers to model their actions after those of the leaders, motivating them to follow in the leader's footsteps. A leader has the ability to express an enticing vision and instill in followers a sense of pride, trust, and regard. When leaders display innovative behaviours by making sure their words and acts are in harmony, they inspire loyalty and commitment from their followers. To rephrase, when leaders act in innovative behaviour, their followers identify strongly with them and have an emotional connection to them. Idealised leaders, more so than those who act on their own initiative, are consistent in their innovative work behaviours. Because of these qualities, such leaders are deserving of the followers' admiration and trust, who look up to them as role models. It seems to reason that the influence wielded by such leaders is the product not just of their actions, but also of how those actions are seen by their followers, that is, how their followers interpret their actions. It is common practise to portray idealised influence leaders as enthusiastic adventurers who like taking risks to change in innovation. Since of this, they are able to foresee, plan, and carry out change inside companies because they are

not frightened of change. As a result of their enthusiasm, their followers are inspired to hope for a better tomorrow, which ultimately encourages them to embrace change rather than maintain the status quo. A leader's willingness to take risks is a skill that helps them steer their organisations through challenging periods and cultivate the resilience that is crucial to the survival of their organisations.

Second dimension of transformational leadership is inspiring motivation. Based on Davranis and Dergisi (2019), those with the attribute of inspiring motivations are called transformational leaders because of their ability to instill a feeling of mission in their subordinates through the communication of grand goals and objectives. Because of these qualities, transformational leaders are able to communicate in a way that is not just clear and understood but also truthful, attractive, and engaging for those they lead. Okoli *et al.* (2021), further refined it by explaining that at the individual level, this vision is realised through a process that considers the abilities of the people involved and their ability to contribute to the vision even while achieving their own personal goals. Depending on the individual, a transformational leader may use an emotional appeal, a logical argument, or a set of aspirational professional goals to inspire their team to work more. By appealing to their higher goals and beliefs through symbolic and emotional appeals, the transformational leader encourages the team to go above and beyond what they would accomplish solely on their own self-interest. The transformational leader does this by rousing the hearts and minds of their followers. If this leader provides support to his or her followers during the idea generation in innovative work behaviour, those followers may be more likely to openly express and put into practise their own original ideas for work.

The third dimension of transformational leadership is intellectual stimulation, as discussed by Davrans and Dergisi (2019) and Okoli *et al.* (2021). Davrans and Dergisi (2019) and Okoli *et al.* (2021) explained that transformational leaders could inspire their followers' innovative and creative capacities by pushing them to rethink traditional conventions, practises, and beliefs. Leadership also entails inspiring one's team to "think beyond the box" when faced with a dilemma. Moreover, they inspire their followers to think beyond the box when confronted with a problem. Instead of encouraging their followers to mindlessly carry out their orders, transformational leaders push their followers to stretch their minds and question established norms. This is one of the ways that transformational leaders promote innovative work behaviour.

Finally for individualised consideration, Okoli *et al.* (2021) mentioned that transformational leaders pay special attention to the specific requirements that each of their followers have in order to develop and succeed. They take the role of a coach, listening to the worries of their followers and providing the right assistance for each of them individually. Individual needs are prioritised alongside organisational goals. In this setting, fairness is prioritised over equality. Charoensukmongkol and Lamsam (2022) discussed in their study transformational leaders are aware that not all people are the same in terms of their capabilities, experiences, requirements, and preferences. Because of this, we give each individual the time and focus they deserve so that we may get to know them on a deeper level and give them the kind of help that will be most beneficial to them, taking into consideration their unique set of abilities and challenges. It was also emphasised that one of the important criteria for encouraging innovative work behaviour in the workplace is to create a culture that supports learning and trust among employees.

Van Assen and Caniels (2022) finding result found out the relationship of transformational leadership to the qualities of leadership as mentioned by Davranis and Dergisi (2019), Okoli *et al.* (2021) and Charoensukmongkol and Lamsam (2022) are associated with innovative work behaviour. Transformational leaders must be able to express an inspirational vision, encourage their followers to challenge the status quo, and give chances for growth and development. Transformational leadership's primary goal is to inspire and encourage subordinates to engage in innovative work behaviour.

Although while transformational leadership has been shown to have significant effects on innovative behaviour in the workplace, research by Bednall, Rafferty, Shipton, Sanders, and Jackson (2018) found negative associations between transformational leadership and creative problem solving on the job. Studies from Sudibjo and Prameswari (2021), for example, suggest that transformative leadership might stifle innovative work behaviour. Moreover, Udin and Shaikh (2022) discovered that transformational leadership had no effect on employees' propensity to engage in innovative work behaviour. Transformational leaders' strong vision and future goals do not appear to modify their critical thinking for greatest work innovation. Transformational leaders are excessively focused on screening employees' opinions, perspectives, and critical ideas that coincide with their vision, which creates reliance, binds minds, and hinders innovative work behaviour. This contradicts the vast majority of prior studies, which found that transformational leadership enhances innovative work behaviour.

2.5.2 The Relationship between Transactional Leadership and Innovative Work Behaviour

The outcomes of a research done by Abasilim, Gbervbie, and Osibanjo (2019) stated there are three types of transactional leadership rewards and punishments. Among these are contingent reward, active management-by-exception, and passive management-by-exception. To accomplish contingent rewards, leaders must first define goals and expectations for their employees' productivity, and then use a motivating mechanism, such as prizes or promotions, to urge their staff to go beyond their capabilities to reach the intended outcomes. Leadership based on contingent rewards can be effective in settings that are more transactional in character or in situations in which it is challenging to foster genuine motivation, innovation, inspiration, and employee involvement. They stated that there are a great number of occupations out there that individuals hold for the sole goal of getting money, rather than out of any sense of calling. In situations like these, the implementation of a contingent incentive system has the potential to significantly enhance innovation, productivity and performance.

Abasilim *et al.* (2019) further explained the provision of as much transparency as is humanly feasible is the essential component of an effective contingent reward strategy for leadership. When workers are aware of the specific benefits that will be available to them if they fulfil particular requirements, it might encourage them to put in significantly more effort to fulfil those requirements such as develop innovative product faster. The reverse of clarity, fuzziness, is not as effective as an incentive since individuals won't be clear what to anticipate in terms of rewards, and they might

not even be sure what is expected of them. This makes it difficult for people to work toward a common goal.

Second dimension based on Abasilim *et al.* (2019), active management by exception is a technique wherein management keep a close eye on operations in an effort to find and fix errors before they happen. In the event that there is an error, it will be swiftly discovered and corrected. They not only prevent problems in a preemptive manner but is also there at all times, advising and demonstrating to the staff what they should be doing. Because of this, the members of the team have the chance to acquire more knowledge and be innovative on how to prevent errors, as well as to receive more involved coaching from their supervisor. Nevertheless, active management by exception is likewise focused on negatives and preventing errors, just like passive management by exception is. The only difference is that active management by exception is more proactive than reactive. A strong active management by exception approach to leadership involves being close enough to the real job to notice problems early on and then making sure that the staff learn from these instances to limit the danger of exceptions in the future. The principle of "management by exception" serves as the foundation for the "active management by exception" method of leadership.

Third dimension of transactional leadership is passive management by exception and it is also referring to Abasilim *et al.* (2019). Passive management by exception is a form of management in which leaders ignore problems until they become catastrophic. If a manager checks the minutiae of an employee's job and is continually looking over their shoulder, the employee will feel less trusted than if the boss just lets them get on with their task without interference. Instead of having to

strictly adhere to a thorough breakdown of tasks and procedures, this gives workers the ability to plan and carry out their job in a manner that is little more to their liking. Passive management by exception leadership style works well in routine situations. These are settings in which a small number of activities and tasks are repeatedly carried out, and the performance of those activities and tasks can be easily evaluated based on the outcome. Two of the most crucial elements of a successful passive management by exception strategy are providing the necessary clarity for the employees and focusing on the conditions that will induce engagement on the part of the manager. The benefit is that some members of the team to be innovative might find better and more effective ways to perform their work, which opens the door for some innovativeness that can be utilised for the improvement of processes and the achievement of a more general increase in the overall productivity of the team as a whole. The fundamental issue with transactional leadership lies in the passive management by exception component. This issue manifests itself in the fact that errors and problems are singled out for attention and punished, while positive feedback and attention are paid to things that are successful only to a limited extent.

In discussing the connection between transactional leadership and innovative work behaviour, Contreras, Espinosa, Dornberger, and Acosta (2017) suggested that transactional leaders may be able to inspire innovation in their workforce just as well as transformational leaders. To put it simply, transactional leaders and their subordinates are bound together by a system of control, authority, and exchange. These links show the use of incentives to inspire individuals to meet their performance goals. The employees are paid based on the completion of the goals, and they are disciplined for their activities that are counterproductive to meeting those goals. Faraz *et al.* (2018) then elaborated through the findings of their study that

transactional leadership has a positive impact on innovative work behaviour which is constant with prior research findings.

According to Afsar and Umrani (2019), their study also showed that transactional leader made performance standards for the followers are made crystal apparent, and the leader motivates the followers by promising them valuable results that match to their own personal interests in exchange for the followers' success in accomplishing the goals. The same can be stated about McCann and Sparks (2019) study, which found a link between transactional leadership and innovative work behaviour. As a consequence, it is reasonable to expect transactional leadership to stimulate innovative work behaviour. Transactional leaders exert control over their staff and give constructive criticism on their performance. This can result in the betterment of processes and routines, as well as the refinement of current knowledge and the fostering of innovative behaviour. Transactional leaders rely on routines and control employees rather than straying from the standard and following established processes. Li and Liang (2021) after that also discovered that transactional leaders had a beneficial impact on corporate culture and innovative work behaviour.

Referring to the study by Baafi, Ansong, Dogbey, and Owusu (2021), despite the fact that transactional leadership has been largely acknowledged as a predictor of innovative work behaviour, the full-range leadership theory proposes that leaders should operate along a leadership continuum. When attempting to predict how subordinates would behave, transactional leadership is an important issue to consider. The superior-subordinate relationship is predicated on a series of implicit deals or exchanges, according to the idea of transactional leadership. According to this idea, subordinates are motivated to behave in their superior's interests since doing so would

yield desirable outcomes for them. Goal-setting, role-delineation, agreement-making, and the provision of incentives and recognition upon the accomplishment of those goals are all key to this type of leadership. Because of the quality of the exchange relationship between them and their leaders, the clarity of the goal, and the expectation of rewards, subordinates of transactional leaders go above and beyond the merely formal requirements of in-role performance to engage in extra-role behaviours such as innovative work behaviour. This is because transactional leaders provide these factors to their subordinates.

Additionally, in research from Rashwan and Ghaly (2022), they explained that innovative work behaviour of employees may be shaped and encouraged via the use of reward and punishment systems. A further benefit of transactional leadership is that it drives teams to improve their innovativeness and productivity. They discovered that transactional leadership may be more suited to fresh idea development and innovative work behaviour. As a result, transactional leaders are more inclined to use organisational rewards and punishments to drive employee performance in order to complete the task and achieve the organization's goal. Consequently, transactional leaders tend to be more authoritarian than democratic leaders.

From Thanh, Quang, and Anh (2022) in transactional leadership, the amount of task achievement is used to determine the type of exchange that takes place between leaders and staff members. This exchange might be physical or spiritual. The leaders are responsible for establishing incentive systems for the performance of the staff, in which the reward will be given to employees based on how well they execute their jobs. Punishments for bad performance or failing to satisfy the leaders' expectations, on the other hand, are viewed as a type of punishment under a

transactional leadership system. Compensation packages that encourage employees to go outside the box in order to meet both immediate needs and long-term goals are effective motivators for fostering innovative work behaviour and leadership. This is the reason why leaders who demonstrate innovative work behaviours are more likely to succeed in their endeavours. This indicates that in order to reach a high level of production, the staff must be inventive. Transactions between leaders and staff members are subject to strict regulations and procedures in order to keep personnel engaged in their work. As a consequence of this, the employees will be given an award. It is not an emotional or psychological procedure but rather one that is focused on the end outcome. The award is meant to serve as motivation and inspiration for innovation and creativity in the workplace.

In contrast, Berraies and Zine (2019) discussed the impact of transactional leadership on innovative work behaviour. Their study found out that transactional leadership happens when a leader instructs his or her employees on exactly what has to be done and how to accomplish it, which inhibits their capacity to think innovatively while at work. This is because their method of leading focuses more on performance and less on encouraging innovation and new ideas among employees. They make it clear to employees what is expected of them, but they do not encourage employees to alter the methods they use or to think creatively outside the box. Transactional leaders ensure that their subordinates comply with their directives by using either rewards or penalties.

In line with the Berraies and Zine (2019) study's conclusion, Fithriany *et al.* (2020) discovered that transactional leadership dampened innovative work behaviour. This is because transactional leadership focuses more on results and less on inspiring

followers to do new things. Hence, the study focuses on the characteristics of transactional leadership associated with the practise of commending people for their innovative work behaviour.

Alheet, Adwan, Areiqat, Zamil, and Saleh (2021) researched also indicates that there is no significant association between a transactional leadership style and innovative work behaviour. A transactional leader does not often make an effort to find out the good job that their subordinates have done, nor do they offer congratulations for the good work that is required of them. The nature of transactional leaders is such that their perspective on the work is one of simple trade. Work in exchange for monetary compensation. A transactional leader never considers it essential to offer praise or congratulations to his subordinates, even when those employees perform admirably. When something truly exceptional is accomplished, the leader will acknowledge it and praise it. A transactional leader has rigid views about the nature of the working relationship, and his employees' only responsibility is to carry out his orders. A transactional leader is someone who uses his position of authority to issue orders to his subordinates and who looks exclusively to the established chain of command. Therefore, subordinates should comprehend their status and accept their superior's plan or directions without question. Due to their reliance on this method, transactional leaders are unable to openly discuss or entertain alternative perspectives. This way of thinking inhibits transactional leaders from coming up with innovative work behaviour when things are not going as planned.

2.6 Research Theory

2.6.1 Behavioural Leadership Theory

King (1990) defined behavioural leadership theory as a theoretical structure for the study of leadership that places an emphasis on the conduct of leaders and how those acts impact the individuals they lead. This theory proposes that effective leaders display a set of behaviours that are linked to favourable results, such as their followers being more motivated, satisfied, and productive. The failure of past leadership theories that concentrated on identifying certain personality qualities that related to good leadership was the impetus for the development of this theory, which explains why those earlier ideas failed. Although these theories were somewhat successful in identifying characteristics, such as intellect, extroversion, and conscientiousness, that related to leadership, they were not successful in explaining why some leaders with these characteristics were more effective than others.

The Ohio University studies, the Iowa University studies, the Michigan University studies, and the Blake and Mouton managerial diagram model are examples of baseline research in behavioural theory (Daft, Kendrick, & Vershinina (2010). According to the research of Daft *et al.* (2010), leaders' actions can fall anywhere on a continuum from completely task- and relationship-focused to somewhere in between. Team leadership was shown to be the most effective according to the Blake and Mouton managerial diagram model because it emphasises outcomes (productivity) and people care more than any other style of management (employee). It was developed by using studies from University of Michigan and the Ohio State University, the Blake and Mouton managerial diagram, sometimes

known as the management grid. Additionally, Daft *et al.* (2010) explained there are essentially two types of leadership behaviours. The first type of behaviour is known as task-oriented behaviour, and it refers to actions that are focused on the accomplishment of certain goals and aims. Some examples of task-oriented behaviours include providing direction, defining roles, and monitoring performance. The second type of behaviour is one that is people-oriented. This type of behaviour refers to actions that are focused on creating positive connections with followers. Some examples of people-oriented behaviours include helping, demonstrating empathy, and acknowledging successes.

According to the Harrison (2018), focus on results attitudes towards others are shown on the vertical axis, from 1 to 9, while aggressive actions are shown on the horizontal axis, from 1 to 9. A variety of leadership styles have emerged as a result of different combinations of two leadership styles. That is why task management is the environment where people are least concerned with other people and are most concerned with getting the job done (9,1). On the other side, managers at golf courses had the most positive opinions regarding their employees and the fewest positive attitudes towards output (1,9). Production-focused and people-centered mindsets are both in dismal shape (1,1). By contrast, team management is characterised by the highest levels of positive behavioural attitudes towards production and individuals (9,9). Lastly, middle-of-the-road management happens when both productivity and people-oriented attitudes are at their average levels (5,5).

Additionally, Deshwal and Ali (2020) explained behavioural leadership theory is the manner in which a leader conducts themselves is the factor that has an effect on

leadership. In contrast to the view that leadership is innate, behavioural theories of leadership propose that it is something that can be acquired via experience. The premise of behavioural leadership theories is that leaders are distinguished from followers by their actions. The basic premise of these ideas is that an effective leader is one whose actions contribute most to the group's success in terms of both production and psychological growth.

The first independent variable in influencing innovative work behaviour is transformational leadership, which is well supported by past research. Daft *et al.* (2010) previously mentioned there are two primary sorts of leadership behaviours. The first type of behaviour is known as task-oriented behaviour and the second type of behaviour is one that is people-oriented. A study by Erturk (2018) found that there is a connection between the theories of transformational leadership and behavioural leadership. To be more explicit, transformational leadership is a style of behavioural leadership that places greater priority on certain behaviours, such as encouraging and empowering followers, and much less emphasis on others, such as monitoring and controlling them. In addition, a transformational leader may also be task- and people-oriented, and a task- and people-oriented manager may also inspire and motivate their team. Cai, Shi, and Yang (2020) discovered that transformational leadership behaviours were favourably associated to employees' innovative work behaviours. This shows that transformational leaders who demonstrate both task-oriented and people-oriented behaviours can motivate staff to participate in innovative activities.

Then, Wang and Cheng (2020) studied the related theories in the study of leadership include behavioural leadership theory and transactional leadership. As per

their findings, transactional leadership is a form of behavioural leadership that prioritises authority and oversight above employee motivation and inspiration. It is possible for a leader to display both task-oriented and people-oriented behaviours, as well as transactional ones like using incentives and penalties to drive subordinates. It has been proposed that good transactional leaders also display a variety of characteristics that are in line with behavioural leadership theory. Farooq, Luqman, Jafar, Alvi, and Malik, (2021) investigated transactional leadership and innovative work behaviour in Pakistani businesses. It was found out that transactional leadership measures, such as laying out specific objectives and providing incentives, were shown to have a significant effect on employees' innovative work behaviour. The study also discovered that transactional leadership improved employee job satisfaction, implying that transactional leaders may also display people-oriented behaviours compatible with behavioural leadership theory.

2.7 Research Framework

The Figure 2.1 below describes the theoretical foundations upon which this study focuses. It is altered so that it can fulfil the requirements of the objective of this research. According to the figure, the independent variables (IV) include two different styles of leadership. These dimensions are transformational leadership and transactional leadership. The innovative work behaviour will serve as the dependent variable (DV) that will be examined. Within the scope of this investigation, it will investigate the link between the aforementioned two variables of leadership styles and automation employees' innovative work behaviour.

Conceptual framework

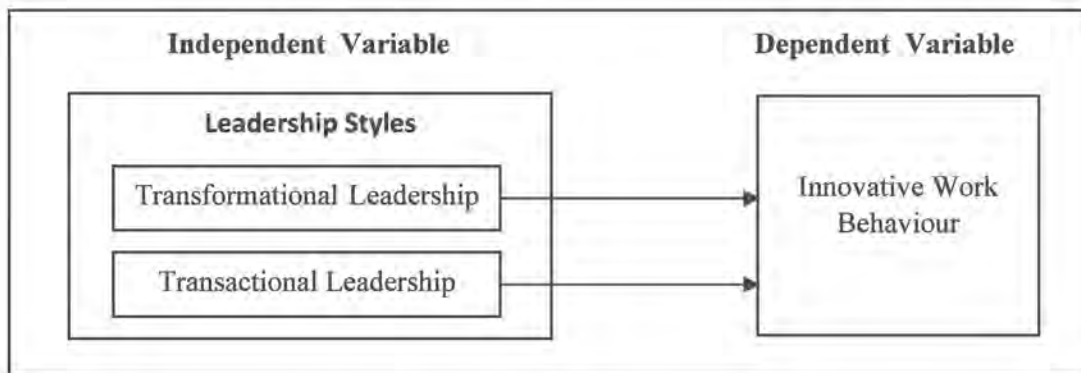


Figure 2.1: Conceptual Framework of the Impact of Leadership Styles towards Innovative Work Behaviour

2.8 Development of Hypothesis

Having displayed through the research framework, this section shows correlation between the variables with the aim that developing hypotheses. This covers the impact that leadership styles have towards innovative work behaviour. Also, hypotheses development and the findings were provided to make some suggestions and recommendations to the future researchers and other industries.

2.8.1 The Correlation between Transformational Leadership and Innovative Work Behaviour

The research conducted by Suhana, Udin, Suharnomo, and Mas'ud (2019) revealed a correlation between transformational leadership and innovative work behaviours. They claimed that the leader could immediately promote new ideas into the organisation and encourage the follower's initiative to innovate. Groselj, Cerne, Penger, and Grah (2020) also found out the connection between transformational leadership and innovative work behaviour among 126 workers of a multinational technological business. Referring to them, transformational leaders are

those who are always thinking of new ways to bring about positive change and actively searching for those new ways. This has the connection to make the workers to think innovatively about the obstacles and possibilities that they face at work and to act on those thoughts.

Meanwhile, referring to the Pradant (2015) study of Indian software engineers, transformational leadership is not linked to innovative work behaviour. This is because employees only innovate when they have two conditions met. First, they expect their leader to provide direction and inspiration, and second, the situation calls for innovative methods. For a transformational leader to successfully motivate their people to think innovatively, they need to have all of the above qualities. Hence, the following hypothesis to be studied:

H₁: There is a correlation between transformational leadership and innovative work behaviour.

2.8.2 The Correlation between Transactional Leadership and Innovative Work Behaviour

Based on the results of a research shown by Wang and Ruan (2019) with data from 497 employees and 101 managers at a major international firm in China, transactional leadership can promote employee innovative work behaviour, which is especially effective in situations when leaders possess a high level of emotional intelligence. Li and Liang (2021) further examined the connection between transactional leadership and innovative behaviour. They also stated that transactional leaders inspire their staff to exhibit innovative work behaviour at almost the same degree as transformational leaders. These results suggest that transactional leadership

could be a potential effective strategy for boosting employees' happiness on the job, which in turn can boost innovative behaviour. This effect is most pronounced when leaders offer clear performance goals and feedback.

Then, according to Alheet *et al.* (2021), while transactional leaders are more concerned with employee productivity than they are with encouraging innovative work behaviour, there is no correlation between their leadership style and workers' tendency to have innovative work behaviour. The staff of Al-Ahliyya University in Amman, Jordan, is the subject of their research. Moreover, Rafferty and Ball (2019) showed that transactional leadership was correlated with a decrease in employees' innovative work behaviour. Hence, the following hypothesis to be studied:

H₂: There is a correlation between transactional leadership and innovative work behaviour.

2.8.3 The Impact of Transformational Leadership towards Innovative Work Behaviour

According to a study conducted by Jia, Chen, Mei, and Wu (2018), transformational leadership has an influence on innovative work behaviour on 133 part-time business students who are now employed by a specific organisation. Transformational leadership benefits organisations because transformational leaders provide employees with a supportive environment and resources that boost employee opportunities for innovation. Rafique, Hou, Chudhery, Waheed, Zia, and Chan (2022) also discovered that transformational leadership has a positive impact on innovative work behaviour,

Nevertheless, Kao, Wu, and Cheng (2018) found that while transformational leadership has a positive correlation with innovative work behaviour, it does not have a significant association with inventive behaviour (i.e., the actual implementation of innovative ideas). According to the authors, other aspects like as resources and incentives may be required to translate a favourable working environment into genuine discoveries. This is reinforced by Kim and Kim (2019), who discovered no relationship between transformational leadership and innovative work behaviour. As a result, the goal of this study is to investigate the impact of transformational leadership on employee innovative work behaviour in the automation business. Hence, the following hypothesis to be studied:

H₃: Transformational leadership have significant impact towards innovative work behavior.

2.8.4 The Impact of Transactional Leadership towards Innovative Work Behaviour

According to Liao, Chen, Hu, Chung, and Liu (2017), to accomplish organisational objectives, transactional leaders seek to provide advantageous outcomes for followers through a combination of reciprocity and risk aversion. Their research showed that employees who reported being led by a transactional leader were more likely to take risks at work. An organization's openness to new methods, procedures, or structures can be ensured even if a transactional leader only has a tangential impact. Referring to the research of Chen, Lin, Chen, and Heng (2018), transactional leaders help their teams more easily embrace new business practises.

In contrast, Jia *et al.* (2018) transactional leaders are accused of putting a premium on safety above innovation. Zhang *et al.* (2021) discovered that transactional leadership had no significant effect on innovative work behaviour. These authors suggest that transactional leadership is more likely to maintain performance standards than to inspire new ideas. Hence, the following hypothesis to be studied:

H₄: Transactional leadership have significant impact towards innovative work behaviour.

2.9 Summary of the Chapter

Leadership style was described by as the pattern of conduct that a leader demonstrates while dealing with individuals they influence. Impact of transformational and transactional leadership on employees' tendency to engage in innovative work behaviour is the topic of this study. In the third chapter, this study will reveal the techniques used to arrive at the study's findings.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter delves into the details of the study methodology, starting with the research design, demographic, and the sampling technique. After that, the discussion explains the research instrument, the technique for collecting the data, and the methods for analysing the data.

3.2 Research Design

The methodological approach taken in this research is quantitative research. In quantitative, it focuses on the quantifying the collection and analysis the data. This is correlational research, which means that its purpose is to analyse the link that exists between two different variables. Since this research only required one cycle of data collection and responses to research questions, the time range for the study is termed a cross-sectional study. In addition, the unit of analysis for this study is the individual which is the employees of an automation company located at Bukit Jelutong, Shah Alam, Selangor.

3.3 Population

Employees of grades N6 (Non-Executive I), N8 (Non-Executive II), E10 (Executive I), E12 (Executive II), E14 (Senior Executive I), and E16 constitute the study's population. Managers from grade M16 (Manager I), M18 (Manager II), M20 (Senior Manager) and M22 (General Manager) are excluded from the list of

population as this research would like to examine the impact of leadership styles towards employees' innovative work behaviour. From the list of employees from grade N6 to E16, a total population is 140,

3.4 Sampling Technique

According to Krecjie and Morgan (1970), the fact that there is a total population of 140, it has been determined that a sample size (n) of 105 will be sufficient for the purposes of this research. The procedure that was utilised in order to determine the appropriate size of the sample is detailed in Tables 3.1 and 3.2. This method is the same formula that Krejcie and Morgan (1970) used to calculate the proposed sample size in order to obtain the suggested sample size:

Table 3.1:
Formula for Determining Sample Size

$s = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)}$ s = required sample size. X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841). N = the population size.

Table 3.2:
Sample Size

$$s = \frac{(3.841)(140)(0.5)(0.5)}{(0.0025)(139) + (3.841)(0.5)(0.5)} = 105$$

In this particular investigation, a method known as simple random sampling was utilised. Shadish, Cook, and Campbell (2002) explained that this method is valid only when there is an equal chance that any of the individuals from a population will be selected. This research used random sampling as the result of the data collection can be inferred to another context. Firstly, list name of 140 employees has been listed down in alphabetical order. Then, from the list, 105 employees have been drawn through the ballot. These 105 lists then became the sample for this study.

3.5 Research Instrument

Essential to both the research process and the design of studies are methods for quantifying the theoretical framework's variables. In this study, the impact of leadership styles (transformational and transactional) towards employees' innovative work behaviour at an automation company in Bukit Jelutong, Shah Alam is investigated. In order to collect their input, a set of questionnaires that consists series of items were constructed with reference to the variables that were used in this research were developed.

These instruments were utilised in order to collect information from the respondents based on a series of predefined questions. This research used questionnaires, a common tool for gathering information. The questionnaires utilised for this study were written in English. Likert scale starting from 1 (Never), 2 (Rarely), 3 (Sometime), 4 (Often), to 5 (Always) were used to measure the variables (Creswell, 2014).

In addition to that, this research amassed primary data through their data collection efforts. The information that has been gathered are required to address the issue at hand directly from the respondents' using questionnaires. This was done with the intention of finding a solution to the issue.

The proposed questionnaire had four separate sections, which were as follows:

- 1) Section A: Respondents' Information
- 2) Section B: Innovative Work Behaviour
- 3) Section C: Transformational Leadership
- 4) Section D: Transactional Leadership

The first part of the respondent's background questionnaire was meant to collect information about the employees of the automation company's demographics. In this area, they were required to provide information on their age, gender, education level, position in the current organisation, and length of service with the current company. The ages of the respondents were divided into five groups: 25 years and below, 26 and 35 years, 36 and 45 years, 46 and 55 years, and 56 years and above. The gender was divided into the groups of male and female respectively. Sijil

Pelajaran Malaysia (SPM), Sijil Tinggi Pelajaran Malaysia (STPM), Diploma, Degree, Master, PhD, and Certificate were the levels of education outlined in the questionnaire. There are now three levels of positions available within the organisation: senior executive, executive, and non-executive. The number of years that a responder has been employed by the present organisation was then divided into five categories: 5 years and below, 6-10 years, 11-15 years, 16-20 years and 21 years and above.

The second part of the questionnaire is concerned with innovative work behaviour, and it was adopted from De Jong and Den Hartog (2010). The idea of innovative work behaviour was evaluated according to the dimensions of idea exploration, idea generation, idea championing, and idea implementation. Hence, innovative work behaviour would be operationalised as employees explore ways to improve things and pay attention to problems that are not part of their everyday work, generate solutions for problems by searching out new working method to execute task, attempt of championing innovative idea by convincing people especially important organisational members and the process of innovative ideas being implemented. Two items were constructed as a part of the idea exploration process. Then in idea generation dimension, three items scale was constructed. For the other dimension, idea championing (2 items) and idea implementation (3 items). For this construct, De Jong and Den Hartog (2010) obtained a reliable Cronbach Alpha value of 0.92. The questionnaire can be referred at Table 3.3 below:

Table 3.3:
Summary of Dimensions of Innovative Work Behaviour

Operational Definition	Dimension of Innovative Work Behaviour	Author
The operational definition of innovative work behaviour is exploring ways to improve things and pay attention to problems that are not part of daily work. Then, generate solutions for problems by searching out new working method to execute task, attempt of championing innovative idea and the process of innovative ideas being implemented	Idea Exploration a. I pay attention to issues that are not part of my daily work b. I wonder how things can be improved Idea Generation a. I search out new working methods, techniques or instruments b. I generate original solutions for problem c. I find new approaches to execute tasks Idea Championing a. I make important organisational members enthusiastic for innovative ideas b. I attempt to convince people to support an innovative idea Idea Implementation a. I systematically introduce innovative ideas into work practices b. I contribute to the implementation of new ideas c. I put an effort in the development of new things	De Jong and Den Hartog (2010)

Transformational leadership style is the third section of the questionnaire. The questionnaire was adopted from the Multifactor Leadership Questionnaire based on the most prevalent model of transformational leadership (Bass & Riggio, 2006). Abu (2019) then also used the questionnaire in his investigation. The questionnaire can be referred at Table 3.4 below:

Table 3.4:
Summary of Transformational Leadership Styles

Operational Definition	Dimension of Transformational Leadership Styles	Author
Transformational leadership would be operationalised as the leader acts in a way that become role models, instill pride, build respect and displays a sense of power and confidence to subordinates. The leaders also talk enthusiastically about the future and articulates an appealing vision that inspires and motivates subordinates. Then, they intellectually stimulate the subordinates to be innovative by questioning ways of doing things, reframing problems and approach new solutions to problems and attends each employees needs and develop their strength through coaching and mentoring	Ideal Influence a. My manager instills pride in me for being associated with him/her b. My manager goes beyond self-interest of the group c. My manager acts in ways that builds my respect d. My manager displays a sense of power and confidence Inspirational Motivation a. My manager talks enthusiastically about what need to be accomplished b. My manager talks about a great vision of the future c. My manager expresses confidence that goals will be achieved d. My manager talks optimistically about the future Intellectual Stimulation a. My manager re-examines ways of doing things if they are up to standard b. My manager gets me to look at problems from many different angles c. My manager seeks differing perspectives when solving problems d. My manager suggests new ways of looking at how to complete assignments Individual Considerations a. My manager spends time teaching and coaching b. My manager considers me as having different needs and abilities from others c. My manager helps me to develop my strength d. My manager sees me as having different aspirations from others	Bass and Riggio (2006)

The notion of transformational leadership was measured based on the dimensions of ideal influence, inspirational motivation, intellectual stimulation and individual considerations. Therefore, transformational leadership would be operationalised as the leader acts in a way that become role models, instill pride, build respect and displays a sense of power and confidence to subordinates. The leaders also talk enthusiastically about the future and articulates an appealing vision that inspires and motivates subordinates. The transformational leaders as well intellectually stimulate the subordinates to be innovative by questioning ways of doing things, reframing problems and approach new solutions to problems and attends each employees needs and develop their strength through coaching and mentoring. Abu (2019) reported a reliability Cronbach Alpha value of 0.78 for this construct. It consists of 16 closed questions divided into four dimensions and each dimension consist of four items.

The last and fourth section of the questionnaire is transactional leadership style. The questionnaire was adopted from the Multifactor Leadership developed by Bass and Avolio (1997). This questionnaire was also used by Hatem and Ibrahim (2020) in their investigation. The aspects of contingent reward, management by exchange (active), and management by exchange (passive) were used to assess transactional leadership. Thus, transactional leadership would be operationalised as how the leaders clarify subordinates their accountability and tasks to get remunerated, continuously monitor employees' performance by fulfilling the agreed standards and focuses on handling errors to prevent mistakes. It also included in the case of the leaders acts passively as they do not attempt to alter anything providing those things

working and only intervene until things turn out badly. The questionnaire can be referred at Table 3.5 below:

Table 3.5:
Summary of Dimensions of Transactional Leadership Styles

Operational Definition	Dimension of Transactional Leadership Styles	Author
Transactional leadership would be operationalised as how the leaders clarify subordinates their accountability and tasks to get remunerated, continuously monitor employees' performance by fulfilling the agreed standards and focuses on handling errors to prevent mistakes. It also included in the case of the leaders acts passively as they do not attempt to alter anything providing those things working and only intervene until things turn out badly.	Contingent Reward a. My manager explains to staff what to do if they want to get remunerated b. My manager talks in explicit terms who is accountable for accomplishing targets Management by Exchange (Active) a. My manager be content when subordinates fulfil agreed standards b. My manager advises subordinates about work standards to do their duties c. My manager focuses on handling errors, failures and objections Management by Exchange (Passive) a. My manager does not attempt to alter anything providing those things working b. My manager does not undertake action until things turn out badly	Bass and Avolio (1997)

Hatem and Ibrahim (2020) reported a reliability Cronbach Alpha value of more than 0.50 for this construct. It consists of 7 closed questions divided into three dimensions. In individual contingent reward dimension, two items scale was constructed. For the other dimension, management by exchange (active) have three items, and last but not least management by exchange (passive) (2 items).

3.6 Data Collection Procedure

This study's primary data gathering was carried out by means of a questionnaire with the following title: "The impact of leadership styles towards innovative work behaviour in automation industry." The data for this study was obtained using google survey. The link was emailed to the sample chosen through a random draw with the permission of the company's head of company. The questionnaire was attached to the cover letter, and it said that responders were obliged to answer all of the questions in the questionnaire and submit it as quickly as they could. This is to avoid any ethical issue due to the use of work email for personal use. On the other hand, some of the respondents might not well known to the meaning of variables tested in this study.

Hence, the pilot test has been conducted at oil and gas employees which the company located at Kampung Baru, Kuala Lumpur. For this purpose, twenty-six questionnaires have been distributed to the oil and gas employees from 7th January 2023 until 14th January 2023. In the framework of this study, a pilot test was conducted to assess the validity and dependability of the instrument used. Table 3.6 shows the results of calculating Cronbach's Alpha for subscales using the Statistical Package for Social Science (SPSS) tool.

Table 3.6:
Result of Reliability Testing

No.	Dimension	Number of Items	Cronbach's Alpha Values
1	Innovative Work Behaviour	10	0.91
2	Transformational Leadership	16	0.93
3	Transactional Leadership	7	0.81

According to the findings of the pilot test, the internal consistency (which assesses reliability by combining the questions in a questionnaire that measure the idea) and a computed Cronbach's alpha for the variables varied from 0.81 to 0.93 at the level of the entire survey.

3.7 Data Analysis Techniques

The Statistical Package for Social Science was used to conduct an analysis of the data gathered from the respondents (SPSS, version 26). This research will look at descriptive data, Cronbach's alpha, Pearson correlation, and multiple regression. The mean and standard deviation of respondents' information are illustrations of descriptive data. Meanwhile, multiple regression is to investigate how innovative behaviour is related to a number of several leadership styles. Pearson correlation demonstrates the correlation between leadership styles and innovative work behaviour.

3.7.1 Descriptive Analysis

Descriptive statistics such as frequencies, percentages, the mean, and the standard deviation used in this investigation. Gender, age, education level, position in current organization, and length of service at current organization were measured using frequency and percentage.

3.7.2 Inferential Statistics

Inferential statistics are used to compare treatment groups and to derive broad conclusions about the entire population of participants. These data are generated from

measurements gathered from a study sample of participants. There are several inferential statistics, each of which is appropriate for a certain study design and sample characteristics in a specific context. Over the course of this study, Pearson Correlation and Multiple Regression were used.

3.7.2.1 Pearson Correlation

Pearson's correlation analysis was used to determine the direction, strength, and significance of the bivariate connection that exists between the variables. The specification supplied by Miller (1991) serves as the foundation for interpreting Pearson's Correlation values (see table 3.7). The criterion of significance will be set at 0.05 or below for the purposes of this inquiry.

Table 3.7:
Interpretation of the Value of Correlation Efficient

Correlation coefficient, r (+/-)	Relationship between variables
0.00 – 0.20	Little or no relationship
0.20 – 0.40	Some slight relationship
0.40 – 0.60	Substantial relationship
0.60 – 0.80	Strong useful relationship
0.80 – 1.00	High relationship

3.7.2.2 Multiple Regression

Multiple regression analysis is a method for determining if there is a relationship between a dependent variable and a number of other parameters that may function as predictors or independent variables (Pallant, 2020). A regression analysis can provide information not just about the overall model but also about the relative

contribution of each variable that makes up that model. Table 3.8 shows the equation for multiple regression:

Table 3.8:
Multiple Regression Equation

$$Y = a + b_1x_1 + b_2x_2$$

Where a is the interception at Y, when $x = 0$

Y = Innovative Work Behaviour (dependent variable)

X1 = Transformational Leadership

X2 = Transactional Leadership

b1 and b2 are the standardized coefficients (betas)

3.8 Summary of the Chapter

The word "research methods" in this study means the procedures used to explore the impact that leadership styles have on innovative work behaviour in the automation industry. This chapter explains how the data acquired are compatible with the standard procedures in the area of research that is being examined. In addition to that, the theoretical background was explored. The measurement taken using the instrument that was utilised was provided, as well as several sample choices. The findings are summarised in the fourth chapter of the report.

CHAPTER 4

RESEARCH FINDINGS

4.1 Introduction

This chapter analyses the response collected from the survey questionnaires issued to respondents. The key objectives of this chapter's investigation are the demographic profile of respondents, an analysis of mean scores, an examination of Pearson's correlations, and a multiple regression analysis between variables.

4.2 Rate of Response

A total of 105 people were chosen to answer the questionnaire, and the link to the google form was provided to them. However, only 101 of them were filled out for further analysis. A response rate of 96.19% were calculated from this. A high response rate was attributed to the hands-on approach to questionnaire distribution and openness to on-the-spot consultations with respondents.

4.3 Descriptive Analysis

4.3.1 Demographic Profile of Respondents

Profile data for the 101 respondents is provided below, including demographic details like gender and age as well as professional details like current position and length of service. Table 4.1 details the respondent demographics used in the study. The gender breakdown of the 101 responders was 55.5% male and 44.5% female. The figure shows that there are more male than female working at the company. Finally, the majority of responders (41%) are between the ages of 26 and 35, while just 4% are

56 and older. The median age ranges from 26 to 35, indicating that many employees in the automation industry are relatively young people.

Table 4.1:
Respondent's Demographic Background (n=101)

Demographic Characteristic	Frequency	Percentage (%)
Gender		
Male	56	55.4
Female	45	44.6
Total	101	100
Age		
25 years and below	19	18.8
26 years to 35 years	42	41.5
36 years to 45 years	23	22.8
46 years to 55 years	13	12.9
56 years and above	4	4.0
Total	101	100
Education level		
SPM	4	3.9
STPM	1	1.0
Diploma	18	17.8
Degree	70	69.3
Master	5	5.0
PhD	1	1.0
Certificate	2	2.0
Total	101	100
Current Position in the Organisation		
Non-Executive	23	22.8
Executive	61	60.4
Senior Executive	17	16.8
Total	101	100
Years of Services in the Current Organisation		
5 years and below	49	48.5
6 years – 10 years	23	22.8
11 years – 15 years	17	16.8
16 years – 20 years	8	7.9
21 years and above	4	4.0
Total	101	100

The majority of the employees who took part in the study (69.3 percent) have at least a bachelor's degree. This is borne up by the respondents' present levels of

employment inside the company: 60.4% are executives, followed by 22.8% who are non-executives, and 16.8% who are senior executives. The largest proportion of respondents (48.5%) have worked for the same company for five years or less, while the smallest proportion (4.0%) comes from those who have been with the company for twenty-one years or more.

4.3.2 Analysis of Mean and Standard Deviation

Both transformational and transactional leadership styles are examined herein. The averages for each factor were 4.09 to 4.22 respectively (with a standard deviation of 0.50 and 0.52 respectively). This could mean that managers are more likely to use transformational and transactional styles of leadership when dealing with their staff. On top of that, a mean score of 4.26 and a standard deviation of 0.47 for innovative work behaviour showed that employees often exhibit innovative work behaviour at the workplace. Table 4.2 below summarises the collected data.

Table 4.2:
Mean and Standard Deviation for Variables

	Mean Statistic	Std. Deviation Statistic
Transformational Leadership	4.22	0.50
Transactional Leadership	4.09	0.52
Innovative Work Behaviour	4.26	0.47

4.3.3 Normality

Data normality is measured by examining the skewness and kurtosis values. Kim (2013) claims that if the sample size is ($50 < n < 300$), then a z-value of higher than 3.29 indicates that the sample distribution is not normal (corresponding to an alpha level of 0.05). In light of this, the z-test was compiled for use in this study. The z-value for transformational leadership (1.35), transactional leadership (0.93), and innovative work behaviour (0.05) are as follows. The details of the normality in Table 4.3. Table 4.3 shows that both the skewness and kurtosis values are acceptable. It proves the normality of the data for this research variable.

Table 4.3:
Test of Normality

	Skewness			Kurtosis		
	Statistic	Std. Error	z-value	Statistic	Std. Error	z-value
Transformational Leadership	-.325	.240	1.35	-.080	.476	0.17
Transactional Leadership	-.223	.240	0.93	-.275	.476	0.58
Innovative Work Behaviour	.013	.240	0.05	-.718	.476	1.51

4.4 Inferential Analysis

4.4.1 Correlation Analysis

Pearson's correlation was used to evaluate the probable association between the two variables. Table 4.4 below shows that there is a substantial correlation between transformational leadership and innovative work behaviour ($r = 0.525$; $p = 0.01$). At the same time, as shown in Table 4.4, there was a greater correlation between transactional leadership and innovative work behaviour ($r = 0.568$; $p = 0.01$).

To be more explicit, the link between transformational and transactional leadership in terms of innovative work behaviour, where both have a substantial level of relationship. Pallant (2020) supports this with a significant association of 0.525 and 0.568. As a result, the relationship between transformational leadership and transactional leadership and innovative work behaviour among automation industry employees in Bukit Jelutong, Shah Alam is significant at the 0.01 level (2-tailed). Therefore, hypotheses H₁ and H₂ are supported.

Table 4.4:
Pearson Correlation

Variable	Innovative Work Behaviour
Transformational Leadership	0.525**
Transactional Leadership	0.568**
n=101 Correlation is significant at the 0.01 ** level (2-tailed)	

4.4.2 Multiple Regression Analysis

Multiple regression analyses were utilised to assess the relationship that exists between leadership styles and innovative work behaviour. The major goal of this study is to discover whether leadership styles influence innovative work behaviour. In this study, leadership styles are regarded the independent variable, while innovative work behaviour is regarded the dependent variable.

Table 4.5 shows the outcome of a multiple regression analysis of two independent variables and innovative work behaviour, with $R^2 = 0.331$ and $F = 25.737$ ($p = 0.00$). The regression coefficient was used to determine which of the two

independent variables has a substantial role in contributing significantly to the dependent variable. Transactional leadership standardised beta coefficient (value = 0.400, $t = 3.198$, $\sigma = 0.002$), indicating that transactional leadership influences employees' innovative work behaviour. Nevertheless, in the case of transformational leadership, the results showed that it had no significant impact on innovative work behaviour (value = 0.223, $t = 1.786$, $\sigma = 0.077$) in the automation industry at Bukit Jelutong. According to the findings of this study, transformational leadership has no impact on innovative work behaviour. The outcome of transactional leadership, on the other hand, has a significant impact on innovative work behaviour. Therefore, hypotheses H_3 is rejected, while H_4 is supported.

Table 4.5:
Multiple Regression Results of the Relationship between Leadership Styles and Innovative Work Behaviour

	Coefficients(a)				
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Constant	1.872	0.342		5.474	0.000
Transformational Leadership	0.213	0.119	0.223	1.786	0.077
Transactional Leadership	0.365	0.114	0.400	3.198	0.002
$R = 0.587^a$					
$R^2 = 0.344$					
Adjusted $R^2 = 0.331$					
F value = 25.737					
Significant of F = 0.000 ^b					

Additionally, Table 4.6 displays the standardised Beta Coefficient, and the values were utilised to generate the following regression equation:

Table 4.6:
Multiple Linear Regression Model Equation

$$Y = a + \beta_1 X_1 + \beta_2 X_2$$

Where,

$$Y = 2.14 + 0.223 X_1 + 0.400 X_2$$

a = constant

Y = dependent variable (Innovative Work Behaviour)

X₁ = independent variable (Transformational Leadership)

X₂ = independent variable (Transactional Leadership)

4.5 Summary of Result

In order to investigate the correlation between leadership styles and innovative work behaviour and the impact of leadership styles towards innovative work behaviour, Pearson correlation and multiple regression analyses were carried out. A summary of the findings from the testing of the hypothesis can be found in table 4.7.

Table 4.7:
Summary of Results

	Hypothesis	Results
H ₁	There is a correlation between transformational leadership and innovative work behaviour.	Supported
H ₂	There is a correlation between transactional leadership and innovative work behaviour	Supported
H ₃	Transformational leadership have significant impact towards innovative work behaviour	Rejected
H ₄	Transactional leadership have significant impact towards innovative work behaviour	Supported

4.6 Summary of the Chapter

The overarching goal of this research is to use what is learned about the impact of leadership styles on automation employees in Bukit Jelutong to predict how those employees would behave in their jobs generally, especially when it comes to innovative work behaviour. This study's conclusion was appropriately supported by the inferential statistic used to answer the study's research question.



CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Introduction

The last chapter will go through the major findings according to the four study objectives stated in the first chapter. This chapter will also discuss the study's practical and theoretical contributions. Following that, this study will summarise with limitations and recommendations for further research.

5.2 Recapitulation of Study Findings

One of the objectives for this study is to look at the impact of leadership styles towards innovative work behaviour in the automation industry. There are four (4) research objectives guiding this study. The first objective is to assess the correlation between transformational leadership and innovative work behaviour in the automation industry. The second objective is to assess the correlation between transactional leadership and innovative work behaviour in the automation industry. The third research objective would be to investigate the impact of transformational leadership towards innovative work behaviour in the automation industry, and the last objective would be to investigate the impact of transactional leadership towards innovative work behaviour in the automation industry.

The independent variables in this study are transformational leadership and transactional leadership. Meanwhile, the dependent variable is innovative work behaviour. The return response rate for this research was 96.19%. From the reliability analysis, Cronbach's alpha result for the variables is accepted with the ranged from

0.81 to 0.93. The respondents' backgrounds were assessed using descriptive analysis, and the level of innovative work behaviour and leadership styles were evaluated using the same way. Following that, both transformational and transactional leadership had good Pearson correlation findings (had a substantial relationship). Transactional leadership has a considerable influence on innovative work behaviour, according to the outcomes of the multiple regression analysis, but transformational leadership has no significant impact on innovative work behaviour.

5.3 Discussion of Findings

5.3.1 The Correlation between Transformational Leadership and Innovative Work Behaviour in the Automation Industry

The first objective of this research is to assess the correlation between transformational leadership and innovative work behaviour in the automation industry.

H₁: There is a correlation between transformational leadership and innovative work behaviour

Table 4.4 shows the findings of a Pearson correlation study, which show a significant association between transformational leadership and innovative work behaviour. Both Yang and Yang (2018) and Chen *et al.* (2019) present data in support of a positive link between transformative leadership and innovation, which is critical for improving business results.

This is aligned with the study from Barchiesi and La Bella (2020). The outcomes of the study demonstrated a correlation between innovative work behaviour and transformational leadership styles in Italy's small and medium-sized businesses.

Transformational leadership focuses on encouraging and enabling followers to reach their maximum potential and have relation with employees' capacities to originate and execute new ideas in the workplace. Similarly, Wang and Li (2020) research result also discovered a correlation between Chinese companies' adoption of transformational leadership and increased rates of innovative work behaviour.

According to Cai *et al.* (2020), when people work in an environment that encourages and supports transformational leadership, they are more willing to take chances and devise innovative solutions to issues. Transformational leaders may unleash their teams' full innovative potential and propel organisational innovation by motivating, challenging, supporting, and empowering their teams. To summarise, when all of this information is taken into consideration, H₁ is supported because there are indisputable contributors to the positive correlation that exists between transformational leadership and innovative work behaviours.

5.3.2 The Correlation between Transactional Leadership and Innovative Work Behaviour in the Automation Industry

The second objective of this research is to assess the correlation between transactional leadership and innovative work behaviour in the automation industry.

H₂: There is a correlation between transactional leadership and innovative work behaviour

Referring to the Table 4.4, there is a substantial relationship between transactional leadership and innovative work behaviour ($r = 0.568$, $p = 0.01$). To summarise, both transformational and transactional leadership styles are linked to

innovative work behaviour. In the study of 497 team members and 101 team leaders at a large Chinese multinational firm, Wang and Ruan (2019) discovered evidence for a favourable relationship between transactional leadership and innovative behaviour.

Then, Li and Liang (2021) studied also supported this research as transactional leaders inspire their staff to exhibit innovative work behaviour at almost the same degree as transformational leaders. Referring to them, transactional leadership can promote employee innovative work behaviour, which is especially effective in situations when leaders possess a high level of emotional intelligence. Leaders that operate on a transactional basis, setting objectives and expectations while rewarding employees for meeting those targets, can foster a conducive climate for innovative problem solving on the job. Hence, H₂ is also supported in this study.

5.3.3 The Impact of Transformational Leadership towards Innovative Work Behaviour in the Automation Industry

The third objective of this research is to investigate whether transformational leadership have impact towards innovative work behaviour among automation employees.

H₃: Transformational leadership have significant impact towards innovative work behaviour

The results indicated that there was no significant relationship between transformational leadership and innovative work behaviour among automated employees ($t = 1.786, p > 0.10$). In the research of workers at stone milling businesses in Indonesia, Wardhani and Gulo (2017) found similar results and

concluded that transformational leadership had no significant influence on innovative work behaviour.

Sudibjo and Prameswari's (2021) study supported these findings further as the fact that workers only depict their work in line with the goals established by the boss, rather than based on their own distinctive attempts to attain organisational goals, is the fundamental reason why this finding is insignificant. It does not appear that transformational leaders' strong vision and future goals will change their innovative thinking in order to exhibit the best innovative work behaviour.

Furthermore, Udin and Shaikh (2022) further explained why the result is not significant. Corresponding results of their investigation, transformational leaders concentrate too great an emphasis on vetting the opinions and suggestions of employees who embrace their goal. This causes employees to feel dependent, shackles their thoughts, and places limits on the innovative work that employees can do. In conclusion, based on the conclusions of these results, H₃ is rejected because transformational leadership has no significant impact towards innovative work behaviour.

5.3.4 The Impact of Transactional Leadership towards Innovative Work Behaviour in the Automation Industry

The fourth objective of this research is to investigate whether transactional leadership have impact towards innovative work behaviour among automation employees.

H₄: Transactional leadership have significant impact towards innovative work behaviour.

The findings indicated a significant relationship between transactional leadership and automation employees' innovative work behaviour ($t = 6.87$; $p = 0.02$). The findings further supported by Faraz *et al.* (2018) because when transactional leadership focuses on rewards and punishments, manager often explains to staff what to do if they want to get remunerated. Employees can be motivated to work towards a goal if the requirements and expectations for remuneration are clearly communicated. This can improve motivation which lead to more innovative work behaviour. Through this, employees also will aware of the specific benefits that will be available to them if they fulfil particular requirements and it might encourage them to put in significantly more effort to fulfil those requirements such as develop innovative product faster.

After that Jia *et al.* (2018) also supported that transactional have significant impact towards innovative work behaviour. They explained that when a manager let the employee go through the mistake in completing the task, it can make the employees learn from mistakes and try to innovate in order to prevent the same mistakes. Employees may feel more comfortable in their work if they understand what is expected of them and what they must perform. This can foster a favourable work environment in which employees feel at ease and confident, thus encouraging innovative work behaviour.

In addition, McCann and Sparks (2019) concluded in their research that transactional leadership brought positive impact towards innovative work behaviour. This is because the manager advices subordinate about work standards to do their duties and followed by their manager be content when subordinates fulfil agreed

standards in transactional leadership. Productive feedbacks on the performance of employees could enhance the techniques and routines, polish existing knowledge, and encourage innovative work behaviour. Besides that, respondents stated that their manager often focuses on handling errors, failures and objections. When these issues are prioritised, they can inspire better care for the details and more efficient procedures, which in turn can boost quality and inspire innovative work behaviour. In overall, based on the findings of these result, it shows that H₄ is supported because transactional leadership have significant impact towards innovative work behaviour.

5.4 Implication of the Study

5.4.1 Practical Contribution

The study's findings have important implications, particularly for company leaders in the automation industry looking to foster innovative work behaviour. The findings revealed that innovative behaviour is significantly impacted by transactional leadership styles. This finding reveals that employees in the automation sector in Bukit Jelutong would want to be rewarded by their supervisors for innovative work behaviour. They are inclined to have transactional relationship with their managers instead of portraying transformational leadership because for them, transformational leaders' clear vision and future goals do not appear to alter their critical thinking and demonstrate the finest job innovation. Additionally, the transformational leaders may too concern with filtering the thoughts, perspectives, and challenging ideas of employees who are aligned with their own goal, which can lead to a feeling of reliance and shackling.

Selection of leaders who represent the desired attributes and availability of leadership development chances to strengthen those traits in current leaders are two practical consequences of leadership styles that can increase innovative work behaviour. Both of these measures may be taken to foster innovative work behaviour. Everyone, from individuals to organizations to teams, has an interest in knowing how leaders behave when they are in charge. It takes skill to be able to encourage and inspire people to follow a guided route, and this capacity is essential for leaders. Leadership involves a lot of learning via experience. If a certain strategy does not prove successful, leaders need to look at different options. During this experimentation phase, leaders have the opportunity to demonstrate their capacity for communication and establish the appropriate level of information to share in relation to the outcomes of the project. Trust may also be built when leaders are upfront about the objectives, the expectations for meeting those goals, and the potential ramifications of either meeting or failing to reach those goals. The findings of this research provide insight into the characteristics of effective leadership that foster an environment conducive to innovative behavior.

5.4.2 Theoretical Contribution

This study contributes to the growing collection of research about the impact of leadership styles (transformational and transactional) towards innovative work behaviour. Given that the leadership styles displayed by a leader may affect the behaviour of the people they lead, this finding lends more support to the behavioural leadership theory outlined in the previous section, providing theory-based context for the findings. This study found that innovative work behaviour was not impacted by transformational leadership, but was impacted by transactional leadership. Overall,

research suggests that a better understanding of the impact of leadership styles towards innovative work behaviour should help organisations select and train leaders capable of successfully promoting an innovative and creative culture. This is the conclusion drawn from the theoretical research on the topic.

5.5 Limitations and Recommendations for Future Research

This study has some limitations that have been noted. The first limitation of this research is its small sample size ($n=105$) of employees from the automation industry in Bukit Jelutong, Shah Alam. Because of the limited sample size, the current study's conclusions cannot be generalised, particularly in terms of reflecting Malaysia's whole population. As a result, in order to produce more trustworthy data, subsequent study samples must have a higher data sample size.

Quantitative approaches are used, which might introduce cognitive biases and inaccuracies into the research. This is because the responders might not read the questions, give inappropriate answers, or both. This means the measured factors and the resulting reactions could not be the same or even be at odds with one another. Thus, the ratings may reflect respondent biases and inconsistencies in judgement. As a result, future researchers would be advised to employ both quantitative and qualitative methods in their work.

Last but not least, researchers can look into what factors, if any, can mitigate the impact of leadership style on employees' tendency to participate in innovative work behaviour in the future. Moderating factors, such as the age of the workforce, the nature of the business, working culture or environment and the support of top

management can all have an impact on how effective a transformational leader can be. Future studies are urged to consider the possibility that there are moderating variables that increase or decrease employees' innovative work behaviour.

5.6 Conclusion

The primary goals of this study are to look at the impacts of transformational and transactional leadership styles on employees' innovative work behaviour in the automation industry at Bukit Jelutong, Shah Alam. The researchers in this study used SPSS for statistical analysis and employed a quantitative approach to data collecting. The impact of the aforementioned leadership styles on innovative work behaviour was of particular interest. The outcomes of this study show that transformational leadership has no significant impact on innovative work behaviour, although transactional leadership does.

Notwithstanding its limitations, this study has clarified the difficulties that were raised. While numerous studies have looked at transformational and transactional leadership, this one fills in the theoretical gaps by focusing on the automation sector in Bukit Jelutong, where transactional leadership was revealed to have a considerable influence on employees' innovative work behaviour. Transformational leadership, on the other hand, has been determined to have no significant impact on innovative work behaviour.

In conclusion, the limits of this study motivate a number of new topics of investigation that are proposed by this study. The outcomes of this study can substantially help future research into the impact of leadership styles on workers' innovative work behaviour. In order to obtain credible results, more respondents will

need to be included in future research. In addition, qualitative or hybrid data gathering approaches may be used in future investigations. It is also recommended that moderating elements be included, which may affect the impact that leadership styles have towards innovative work behaviour.



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Appendix 1: Cover Letter for Questionnaire



UNIVERSITI UTARA MALAYSIA KUALA LUMPUR

41-3, Jalan Raja Muda Abdul Aziz, Kampung Baru, 50300
Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur

20TH DEC 2022

To Whom It May Concern

Sir / Madam

I am a Master student of Universiti Utara Malaysia Kuala Lumpur. Currently I am conducting a research on **'THE IMPACT OF LEADERSHIP STYLES TOWARDS INNOVATIVE WORK BEHAVIOUR IN THE AUTOMATION INDUSTRY'**. The objective of this study is to investigate the impact of leadership styles towards innovative work behaviour among employees at automation industry.

Your help is requested in this research by completing the attached survey instrument and returning it in. The information you provide will remain strictly anonymous and confidential.

Your participation in completing the questionnaire is very important to the success of this research. It will be an honour if you are able to return the completed questionnaires by **14TH JANUARY 2023.**

I would appreciate your returning the questionnaire at your earliest convenience. Thank you in advance for your cooperation. Should you have any enquiries, please do not hesitate to call me at 019-2267361.

Sincerely,

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School of Business Management
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Academic Supervisor

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Appendix 2: Questionnaire

SURVEY QUESTIONNAIRE

THE IMPACT OF LEADERSHIP STYLES TOWARDS INNOVATIVE WORK BEHAVIOUR IN THE AUTOMATION INDUSTRY

SECTION I : Respondent's Background

Please **TICK** (☐) the appropriate response category which applied to you.

1. Gender:

☐ Male ☐ Female

2. Age:

☐ 25 years & below ☐ 26 years - 35 years ☐ 36 years - 45 years

☐ 46 years - 55 years ☐ 56 years and above

3. Education Level (choose the highest):

☐ Sijil Pelajaran Malaysia (SPM) ☐ Sijil Pelajaran Tinggi Malaysia (STPM)

☐ Certificate ☐ Diploma ☐ Degree ☐ Master ☐ PhD

Other (please specify) : _____

4. Current Position in the Organisation

☐ Non-Executive Level ☐ Executive Level ☐ Senior Executive Level

5. Years of Services in the current Organisation

☐ 5 years and below ☐ 6 to 10 years ☐ 11 years – 15 years

☐ 16 years – 20 years ☐ 21 years and above

SECTION II : INNOVATIVE WORK BEHAVIOUR

Listed below are statements describing employee innovative work behaviour. Please indicate the degree of your agreement to each of the statement by tick the rating provided.

1= Never 2= Rarely 3= Sometime 4= Often 5= Always

	1	2	3	4	5
Innovative Work Behaviour					
<i>Indicators (How often does this employee..)</i>	Never	Rarely	Sometime	Often	Always
A. Idea Exploration					
I pay attention to issues that are not part of my daily work					
I wonder how things can be improved					
B. Idea Generation					
I search out new working methods, techniques or instruments					
I generate original solutions for problems					
I find new approaches to execute tasks					
C. Idea Championing					
I make important organisational members enthusiastic for innovative ideas					
I attempt to convince people to support an innovative idea					
D. Idea Implementation					
I systematically introduce innovative ideas into work practices					
I contribute to the implementation of new ideas					
I put effort in the development of new things					

SECTION III : TRANSFORMATIONAL LEADERSHIP STYLES

Please read the following statements carefully and indicate the degree of your agreement to each of the statement by tick the rating provided. A Likert Scale of 1 - 5 is used to signify the range of your ratings as below:

1= Never 2= Rarely 3= Sometime 4= Often 5= Always

Leadership Styles	1	2	3	4	5
<u>Transformational Leadership</u>	Never	Rarely	Sometime	Often	Always
A. Ideal Influence					
My manager instills pride in me for being associated with him/her					
My manager goes beyond self-interest of the group					
My manager acts in ways that builds my respect					
My manager displays a sense of power and confidence					
B. Inspirational Motivation					
My manager talks enthusiastically about what need to be accomplished					
My manager talks about a great vision of the future					
My manager expresses confidence that goals will be achieved					
C. Intellectual Stimulation					
My manager re-examines ways of doing things if they are up to standard					
My manager gets me to look at problems from many different angles					
My manager seeks differing perspectives when solving problems					
My manager suggests new ways of looking at how to complete assignments					
D. Individual Considerations					
My manager spends time teaching and coaching					
My manager considers me as having different needs and abilities from others					
My manager helps me to develop my strength					
My manager sees me as having different aspirations from others					

SECTION IV : TRANSACTIONAL LEADERSHIP STYLES

Please read the following statements carefully and indicate the degree of your agreement to each of the statement by tick the rating provided. A Likert Scale of 1 - 5 is used to signify the range of your ratings as below:

1= Never 2= Rarely 3= Sometime 4= Often 5= Always

	1	2	3	4	5
Leadership Styles					
<u>Transactional Leadership</u>	Never	Rarely	Sometime	Often	Always
A. Contingent Reward					
My manager explains to staff what to do if they want to get remunerated					
My manager talks in explicit terms who is accountable for accomplishing targets					
B. Management by Exchange (Active)					
My manager be content when subordinates fulfil agreed standards					
My manager advises subordinates about work standards to do their duties					
My manager focuses on handling errors, failures and objections					
C. Management by Exchange (Passive)					
My manager does not attempt to alter anything providing those things working					
My manager does not undertake action until things turn out badly					

*** Thank You ***

ALL INFORMATION WILL BE KEPT CONFIDENTIAL.

Appendix 3: Reliability Analysis

i. Innovative Work Behaviour

Case Processing Summary

		N	%
Cases	Valid	26	100.0
	Excluded ^a	0	.0
	Total	26	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.906	.913	10

ii. Transformational Leadership

Case Processing Summary

		N	%
Cases	Valid	26	100.0
	Excluded ^a	0	.0
	Total	26	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.931	.934	16

iii. Transactional Leadership

Case Processing Summary

		N	%
Cases	Valid	26	100.0
	Excluded ^a	0	.0
	Total	26	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.806	.842	7

Appendix 4: Descriptive Analysis

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
MinIWB	101	3.20	5.00	4.2614	.47349
MinTRANSFORM	101	3.00	5.00	4.2153	.49714
MinTRANSAC	101	3.00	5.00	4.0863	.51788
Valid N (listwise)	101				

Appendix 5: Correlations

Correlations

		MinIWB	MinTRANSFORM	MinTRANSAC
MinIWB	Pearson Correlation	1	.525**	.568**
	Sig. (2-tailed)		.000	.000
	N	101	101	101
MinTRANSFORM	Pearson Correlation	.525**	1	.756**
	Sig. (2-tailed)	.000		.000
	N	101	101	101
MinTRANSAC	Pearson Correlation	.568**	.756**	1
	Sig. (2-tailed)	.000	.000	
	N	101	101	101

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix 6: Multiple Regressions

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.587 ^a	.344	.331	.38728	1.803

a. Predictors: (Constant), Min3, Min2

b. Dependent Variable: Min1

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.720	2	3.860	25.737	.000 ^b
	Residual	14.699	98	.150		
	Total	22.419	100			

a. Dependent Variable: Min1

b. Predictors: (Constant), Min3, Min2

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.872	.342		5.474	.000		
	Min2	.213	.119	.223	1.786	.077	.429	2.334
	Min3	.365	.114	.400	3.198	.002	.429	2.334

a. Dependent Variable: Min1



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