

Managers' Readiness To Adopt E-Leadership

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Abstract - The main purpose of this study is to examine the level of practices of face to face, media richness and virtual team towards readiness of e-leadership adoption, and to examine the relationship between face to face interaction, media richness and virtual teams on e-leadership adoption. The study employed a quantitative analytical method which involved a sample size of (190) where a (23) paragraph questionnaire was distributed through field visits and online forms. The study has revealed several findings. It showed that there are statically significance differences at level (0.05) with regards to the factors towards managers' readiness to adopt e-leadership. The study will contribute to the field of e-leadership. The model presented in this study will be helpful for managers to adopt e-leadership as a form of interaction to impact on their environment. It will also help managers decide which factor is more interactive. There was a lack of similar past research regarding this topic making it difficult to compare and refer results with other past studies,

especially in Malaysia. Secondly, the small number of respondents for this research may result in sampling errors, as it may not represent the whole population at the high education sectors. The scope was limited to managers only in Malaysian companies. The significance of this examination lies in the degree of usage of the effect of embracing e-leadership in enhancing managers' execution and how it very well may be motivated to do as such. Besides, the result of the investigation will demonstrate the significance of e-leadership for directors in their workplace.

Index Terms E-leadership, Face-to-Face Interaction, Media Richness, Virtual Team, Managers' Readiness, Adoption.

1 Introduction

The process of a social impact where a change in attitudes, emotions, thinking, behavior and/or performance with individuals, groups, and/or organizations cause by technology is what defines e-leadership according to Fryer, M. (2011) Avolio et al., (2014).

The technology has always been suggested that it will become too deeply rooted in

business practices that it will soon enough happen that “e” to be added in front of the leadership word by anyone. However, organizations and their managers now are struggling with technology integration into their managerial processes. This is also getting more complicated by the learning curve of steep technology that many managers run into (Kouzes and Posner, 2007).

The purpose of this study is to shed some light on the willingness of managers to adopt e-leadership, as well as the effects of using electronic leadership roles on organizations and managers’ working environment. In addition, it promotes new knowledge of e-leadership and addresses the willingness of managers to embrace e-leadership.

It is known that technology is allowing in an excessive manner for one to be able to work from home and anywhere by changing the mode and style of cooperation and correspondence. Videoconferencing, online joint effort programming, mobile phones, email, Wi-Fi, and other innovative apparatuses are adding to a developing number of virtual organizations and groups.

According to Janet Sternberg (2012) who believed that mutual influence of individuals’ direct physical presence with his/her body language is what define face to face interaction which means that and lack of it means lack of cooperation that negatively can affect and work-related results such as productivity, job satisfaction and organizational commitment with managers in the work environment as suggested by (L. R. Wolfeld, 2010). Organizations’ managers consequently will have an interest in interacting face to face and promote such a way that will lead to manifesting them in group work, teamwork and impromptu interactions.

Daft and Lengel (1986) who started to define media richness as the information ability to make changes to understanding

in the interval time by the use of tools of communication technology. Furthermore, it is a reference to the capacity of what provided by the technology of instant feedback, the number of channels and signals used for the personalized messages and the diversity of languages.

Virtual teams are work teams distributed geographically spread over and manage their work mainly through communication technologies and electronic information such as e-mail, video conferencing, telephone and etc.as stated by Lillian S C, (2014). They function over time zones. Besides, face to face interaction was replaced by virtual teams to a great extent and many companies internationally were not able to exist without virtual teams that have become very important for the functioning efficiency of an organization according to (Kutlu, et al, 2013).

The purpose of this research is to examine the influence of managers to adopt e-leadership, also to determine managers performing through using E-leadership roles in order to identify critical success roles shown in figure 1 below that can be leading managers to adopt E-leadership.

Managers and leaders who are poor at personally adopting new technologies are less effective and poor role models (Van Wart, 2015). Describe that e-leadership should not be seen as just an extension of the ‘traditional’ face-to-face leadership Gibson et al, (2003) Avolio, et al, (2010). Moreover, it is necessary even though some of the fundamental principles of managers will still be the same, to introduce a the fundamentally new way of viewing the manager-follower relationship, both within and between organizations Avolio et al, (2003)

Managers and leaders with poor personal information technology skills not only limit their options but are generally seen as less effective (e.g., forthcoming by author) Wart, et al, (2017). the new type of managers and leaders need to be adapting to the necessity of the virtual environment

as referred to be e-leadership. According to Zaccaro et al, (2003) “E-leadership will be the routine as opposed to the special case in our reasoning about what comprises hierarchical initiative and chiefs”.

Managers need to generate e-leadership roles inter-generational cooperation (meaning, between the baby boomers, and the generations X, Y, and Z). William J. Schroer (2008). Annunzio (2001)

By all means, the writer expects to express the directors status to receiving e-leadership to react to the new jobs of rivalry in the advanced age; to change in the association and help to help e-pioneers pull in the best ability from generations X, Y, Z; and to underscore the persevering integrity of customary corporate for the best of workplace (Tay Angeline 2011) (Gursoy et al 2008). Based on that, this research tries to answer the following question:

- 1) What is the level of practices of face to face, media richness and virtual team towards readiness of e-leadership adoption?
- 2) What is the relationship between Face to Face, Media Richness, and Virtual Team towards managers' readiness to adopt E-leadership?

The consequence of this study is to find out the readiness of managers in adopting e-leadership roles as the world of business moving day by day through the digital world. Moreover, this study will find out the relationship between the dependent and independent variables as shown in figure1.

As all managers are keen to improve their performance to achieve superior act for their working areas, through sharing innovation, vision, decision making, inspiration, and empower their workers, and all that success can be achieving at the level of their efficiency in managing Keeping up with new strategic plan and technology all that can be done through using E-leadership roles.

Furthermore, thus, the significance of this examination lies in the degree of usage of the effect of embracing e-leadership in enhancing managers' execution and how it very well may be motivated to do as such. Besides, the result of the investigation will demonstrate the significance of e-leadership for directors in their workplace.

This study will concentrate on the readiness of managers for using E-leadership; also, this study will focus whether manager's readiness to adopt independent roles such as face to face, media richness, and virtual team or some of them on their work areas.

Therefore, the main objectives of this study are (1) To examine the level of practices of face to face, media richness and virtual team towards readiness of e-leadership adoption, and (2) To examine the relationship between face to face interaction, media richness and virtual teams on e-leadership adoption.

Initially, this study will focus to understand the readiness of managers to adopt E-leadership in Malaysian companies. Furthermore, the study will be presented to managing departments as they are the target of this study where it will be distributed to them. Besides, this study will comprehend and compile all literature and previous study relating to this topic.

2 Literature Review

2.1 Leadership

As comprehensive as the topic of leadership, the following will define and examine the definitions, types, and styles of leadership with its importance to the public and private sector of managers. As part of the literature review, and to put this study in context, this research will also examine the main types of leadership also the difference between leadership and E-leadership.

It is defined as the method of interactive effectiveness that happens when, in a given context, some people accept their leader to achieve common goals (Alberto Silv, 2016). It is also social influence practicability in which a leader is seeking a willing involvement of subordinates to reach and achieve organization goals (Bunmi Omolayo, 2007).

Being aware of that, managers can doubtlessly have several distinctive leadership types to run a company. A man or woman is commonly extra comfortable with a single leadership type, and so will stick with it even when the circumstances change. Previous studies have analyzed the effect of other leadership patterns on managers and organizational overall performance. This leadership style is referred to as Transactional management, Transformational leadership, and genuine leadership and that the impact of that behaviors alternates within the manager's roles too and managers have accompanied the leader's perception.

Transactional Leadership - This style of leadership makes a specialty of close monitoring, in detecting mistakes and errors and putting in place corrective actions to resolve them (Timothy et al, 2011), Khan, S. (2010). According to Bass B. M. (1997), the purpose of transactional leadership might be to "transect" managers', people and corporations in a literal sense - to regulate them inside the thoughts and coronary heart to make bigger imaginative and prescient vision, perception, and understanding to make clear reasons, make behavior congruent with values, concepts and result in changes which might be permanent, self-perpetuating and momentum building.

Transformational Leadership - It is the reason which emphasizes the exchange of rewards which includes leaders', managers' and followers' compliance. Which means that paying attention to subordinates' competencies, skills and encourages to agree with, motivation,

awareness with the motive to maximize human capabilities (Timothy et al, 2011). As a result, managers, as well as subordinates, turn out to be extra creative and innovative in the manner that they control and resolve the issues of their approach to implement new thoughts.

Authentic Leadership - With this form of leadership style, employees are in absolute subjection to their manager's. Even though decisions are made very quickly, and work gets carried out faster, recommendations and evaluations are hardly ever appreciated by means of employees (Leadership Styles, 2012). Therefore, there may be a need for managers in organizations to contribute to not only in terms of knowledge or ideas, however additionally in making proper decisions and responding to the modifications in a short time.

2.2 E-Leadership

E-leadership has been rethought as a hypothesis, research, and practice that have developed as for about the work as well as to its suggestions because of e-administration capacities. As a large portion of associations ideas has been changed, types of business which up to this point were viewed as strong and secure and connecting it for enhancing the aptitudes of directors through utilizing it in their ordinary work.

In addition, Information and correspondence innovation (ICT) has advanced electronic correspondence and encouraged the more extensive availabilities of assets and abilities (Ocker et al., 2007).

According to (Avolio and Kahai, 2010) that e-leadership is a strategy for the social effect that happens in an authoritative setting wherein a lot of work, correspondence, is upheld by utilizing data innovation.

2.3 Leadership vs. E-Leadership

These days numerous directors, pioneers and gathering people keep in contact with one another with the guide of communicating through a cellphone, medium-term express email, fax machine, and groupware adapt which incorporates email, announcement sheets, visit and video conferencing. Considering those progressions, directors have all begun to discuss e-leadership in reference to supervisors who lead some of the procedures of e-leadership in vast part through computerized channels. Leadership in advanced time is very surprising. We completely need to expect

that what has changed and what has continued as before as the undeniable and extraordinary improvements in PC and interchanges and communications innovation continues changing the world. One inconceivably basic setting for authority is the effect of e-jobs on leadership. in accordance with (Avolio, et al. 2003), it's far unique since it adjusts the styles of the manner in which data is gotten, put away, deciphered and dispersed and that, thusly, modifies how individuals are invigorated and the manner in which choice is made in associations by directors and pioneers. Table 1 underneath demonstrates the contrast between administration and e-leadership.

Table 1. Leadership vs. E-Leadership

S.N.	Parameter	Leadership	E-leadership
1	Environment	Real Word	Virtual Word
2	Role of ICTs	Not required	Mediated through ICTs (He 2008)
3	Organization	Real organization	Virtual organization
4	Team	Real team	A virtual team (VT)
5	Superior-subordinate relationship	Command-and-Control	Collaboration
6	Command	Authority- based	Expertise-based

The basic contrasts of e-leadership might be in what is implied by utilizing "feeling the managers and leader's' quality", and achieve, speed, lastingness, and view of a pioneer's and director's communication techniques. Be that as it may, the motivation behind e-leadership too is to take the relationship among hierarchical people characterized by methods for an association's structure. The most basic primary concern is that e-initiative at the appropriate time isn't constantly about interfacing innovation, anyway about associating individuals!

Monika Bansal (2008) expressed that inside the contemporary investigation customary leadership or real authority has been mulled over as a way in which the managers are physically present together with his colleagues and leaders devotee connection is up close and personal (face-

to-face interaction) paying little heed to the kind of initiative pursued by pioneer and chiefs. E-leadership has been respected from a point of view in which the managers is not in every case physically present with the colleagues and interfaces with them through the methods for data innovation.

2.4 Managers Readiness to Adopt E-Leadership

Parasuraman et al., (2014) described technology readiness as presently; the majorities of people undertake and use technologies to accomplishing goals in their everyday life and at work too". This indicates that the levels to which people are prepared to apply new technologies, in preference to their real capacity in this regard (Caison et al., 2008). Meuter et al.

(2005) argue that people's technological readiness could be very critical within the trial and use of recent technologies.

Parasuraman (2000) found that technological readiness is a great predictor of technology-associated behavior, and therefore argues that understanding the technology readiness of managers, or person may want to assist a commercial enterprise in growing as its technology strategy and the manner in it manages the link between managers, or any person or group and technology (Astut et al., 2014). Furthermore, it is important for the future of managers to adopt e-leaders in their manner of tracking and controlling their

work because of the changes in work structure and the technological advancement is a facilitating factor that enables that.

It is no longer applicable to make use of the traditional command and control manners while the work environment is changing as a reason that people are to a large extent collaborating both outside their department and even outside their own organization works, in addition to that managers should then try to track everything which will be only found possible through using technology (Nunamaker et al, 2009).

2.5 Research Framework

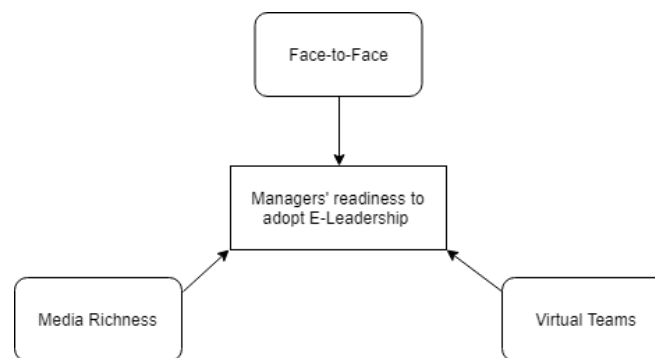


Fig. 1. Research Framework

The figure above conceptualizes the conceptual framework of this study to present the study of adopting e-leadership roles independent variable which include face to face interaction, media richness and virtual and their relationship towards the dependent variable, the managers' readiness to adopt e-leadership.

2.6 Face-to-Face Interaction

Technology has changed the way we work and communicate in this modern-day virtual age. Colleagues can collaborate irrespective of their location, employees can make money working from home, and managers can get important messages out

to a group of workers efficiently. Advances in communication and information technology (AIT) have created new opportunities for organizations to construct and manage a new approach which is face-to-face interaction (Wolfeld, L. R. (2010).

Associations and companies' correspondences these days depend on present-day correspondence advancements which incorporate electronic sends, telephone calls or diverse online meetings, which empower correspondence paying little mind to the physical separation.

The worldwide market today, combined with expanded travel costs, tight calendars

and elevated standards for the venture's yields, is probably going to help a blast of worldwide virtual face to face ventures (Raisinghani, Arora, Baylor, Brown, Coleman, and Craig, 2010).

The strength of face to face meetings has not been lost in some of the world's most successful companies. It is said that Apple founder Steve Jobs designed workspaces to force people to make more personal interactions (Tpoftf .et al, 2015).

2.7 Media Richness

It can be described as the ability of information to exchange understanding over a period (Bergin, Richard 2015). Notwithstanding face to face collaboration, the richness of media assumes a job electronic leadership and optional connections in the business situations of corporate chiefs (Torres et al., 2009). Media richness alludes to the capacity of innovation to give prompt input, the number of signs and channels used to distribute messages, and dialect decent variety. With regards to electronic authority, the lavishness of the media turns into a main consideration of cooperation as indicated by (Avolio et al., 2001. Bergin, R. 2010). The lavishness of the media can be depicted as the capacity of data to change understanding over some stretch of time.

Bergin, Richard 2015 they discovered that use of synchronous media such as cellphone and live chat sessions are considered to have higher ranges of media richness than asynchronous media, interoffice memo or e-mail. And the satisfactory choice for managers to adopt media richness in e-leadership for the work environment's only via the use of synchronous function as referred to above. Moreover, high rich communication media can help managers and receivers understand what the other party wants to convey, as well as include contextual information regarding the context. Media

richness is critical for the understanding of communication technologies and it's far consequently critical for managers to apprehend the results of using distinctive media.

2.8 Virtual Teams

Virtual teams are distributed geographically distributed task forces and manage their work primarily with electronic communication and information technologies such as e-mail, teleconferencing, and more. Lilian, S. C. (2014) said that virtual teams are geographically and organizationally dispersed teams that function over time zones.

Virtual teams have changed face-to-face groups to a bigger extent and a variety of worldwide organizations could not continue to exist without virtual teams which have turn out to be a necessity for the efficient functioning of an organization (Kutlu, et al, 2013). However, there may be still a major issue in managing the overall performance of virtual teams. It is also claimed that as virtual teamwork differs from face-to-face teamwork, new technology-based work strategies are needed with the intention to make virtual teams succeed (Nunamaker et al, 2009).

2.9 E-Leadership Theory X, Y, and Z Generations

A limited number of studies concerning the organizational performance of businesses, even less research on theories X, Y, Z portrayed the impact of e-leadership roles performance in the work environment with different types of generation as stated by Arslan, A., & Staub, S. (2012).

Subsequently, every generation has a one of a kind mixes of understanding, skill, the point of view and desires. Their similitudes as far as work esteems, demeanors, inclinations, desires, recognition, and practices are believed to

be turned around from the equivalent verifiable, financial and social primitive encounters (Smola et al., 2002, Zemke et al., 2000).

Generation X - Age group X alludes to as lost descent that is conceived between 1966 - 1976 and achieving their age of 36 to 52 years of age as of the year 2018 (William, 2008, Tay, 2011). Age X found from their older folks that following business undertaking principles and directions are minimal most likely securing their occupations.

Generation Y - Generation Y is outstanding as Millennials, conceived somewhere in the range of 1980 and 2000 (William, 2008, Tay, 2011). Tay Angeline (2011) called attention to that age Y supervisors may keep on being longer in associations that make ventures and supplies advanced innovations and make

their employments intriguing, extreme and fascinating.

Generation Z - This new generation has certainly attracted the attention of academics and consulting firms' attention as well. The internet generation and the first mobile experts according to or indigenous generation digital population, whose members begin to enter the labor market and begin to have the financial strength to become desirable clients for many markets, In this age, manager's conduct towards work and vocation is basic, given that an examination arranged by Adecco in 2015 in the US work showcase recommends that in under three years (in 2019), the Z age will be a greater amount of 20% of the workforce (Adecco, 2015).

2.10 Previous Studies

Table 2. E-Leadership Studies

No	Author, Year	Issue	Highlights
1	Avolio, Walumbwa, and Weber (2009)	The challenges of using new technology in the concept of E-leadership	The outcomes of the study found that driving for all intents and purposes through E-leadership on virtual not just includes leading individuals from various offices and divisions of one's own association, yet at times even individuals from contender organizations.
2	Kerfoot (2010)	The importance of using E-leadership in healthcare	Utilizing Distance leadership (or E-leadership) was observed to be progressively supplanting conventional initiative on the grounds that propelling advances can bolster new models of wellbeing framework communications.
3	Shriberg (2009)	To identify the importance of using E-leadership internationally.	Noticed that while only a couple of years back virtual leadership appeared an assignment significant for global combinations, today virtual authority is basic for any business that endeavors to develop and extend.

4	Terence (2006)	To examine the main challenges that E-leadership can face it in the new collaborative workplace which is evolving both globally and virtually and presents and those two major challenges: isolation and confusion.	The researchers examined e-leadership issues and gave direction on what the e-leaders can do to maintain a strategic distance from these issues. The rules included recommendations for speculation proactively, applying social knowledge, staying individual driven, setting up consistency, and driving for exact interchanges.
5	Karpova et al, (2008)	To identify How global learning teams utilized technology in E-leadership by using a virtual collaboration to solve complex problems.	The creators asserted that the model augments the capability of worldwide groups and encourages more noteworthy joining of utilizing E-leadership and virtual joint effort into a topographically scattered group.
6	Navarro et al, (2010)	Studied the effect of communication and information technologies (CITs) on group functioning and group outcomes.	The outcomes demonstrated the virtual groups had changing degrees of virtually. Likewise, it demonstrated a differential job of gathering collaboration style as indicated by the level of gathering for all intents and purposes.

Table 3. Face-to-Face Interaction Studies

No	Author, Year	Issue	Highlights
1	(Misra et al, 2014).	To examine the relationship between the presence of technology devices and the quality of real life, in-person social interactions face to face.	Authors found that discussions without communications advancements were appraised as essentially prevalent contrasted and those within the sight of innovative gadgets.
2	Przybylski et al, (2012)	To identify that the presence of communication devices in social settings interferes with human attention.	The researchers discovered proof that these gadgets effects affect closeness, association, and discussion quality, particularly outstanding when people are participating in by and by important subjects.
3	(Adler, 2013).	To examine that technology does not impact face-to-face communication negatively.	The researcher found that utilizing digital communications upgrade consideration of other's through reaching them and the proof reliably demonstrates that the more you speak with individuals utilizing gadgets, the more probable you are to speak with those individuals up close and personal (face-to-face)
4	(Majchrzak	To identify that virtual	The analysts found that the contrasts

	et al, 2004)	teams in video conferencing are inferior to face-to-face teams.	between these group composes, that Videoconferencing an innovation that comes the nearest to up close and personal correspondence s exorbitant and still not exceptionally productive.
5	(Griffin & Moorhead, 2007).	To emphasize the importance of using the virtual team rather than using face to face can help to develop worldwide companies such as Cisco, Boeing (case study)	Those companies see virtual teams' importance than face to face such as an opportunity to improve strategic partnerships with other organizations worldwide. Also, that develops infrastructure and networks for businesses.

Table 4. Media Rashness Studies

No	Author, Year	Issue	Highlights
1	Shiue et al. (2010)	To identify the best leadership practices of effective leaders through virtual teams.	Researchers found media richness has significant and positive effects on expected risk.
2	Liu, et al, (2009). Allen, & Palvia, 2008;	To examine the impact of using (text) media rather than using rich (video) media.	Discoveries from these investigations by and large bolstered MR: lean (content) media were as powerful as and more proficient than rich (video) media in introducing analyzable assignments (e.g. correspondence or investigation of actualities and calculation of scientific techniques).
3	(Chunawalla & Sethia, 2008).	The effect of using media richness for business work and advertisements	The result of a study that the selection of the appropriate media richness channel is the key to the success of an advertising campaign and work environment.
4	Cable and Yu, 2006	To understand the effects of using media richness, and face to face interaction.	The examination found that up close and personal communication (face to face) prompted more precise picture convictions than utilizing media richness.
5	(Dineen et al., 2007).	Importance of media richness for managers and jobs seekers.	The examination found that media lavishness may build data obtaining for directors to find out about occupations searchers data. Additionally, will enhance work searchers' capacity to surmise signs around an association's way of life.

Table 5. Virtual Teams Studies

No	Author, Year	Issue	Highlights
1	Malhotra, Majchrzak, and Rosen (2007)	To identify the need for using media richness in the daily work of human life.	<ul style="list-style-type: none"> a) Generate and manage trust using ICT (data and correspondence innovation); b) (b) Make beyond any doubt that circulated assorted variety is both plainly comprehended and in addition very much valued; c) (c) Effectively screen and deal with the existence cycles of virtual work; d) (d) Monitor and deal with the virtual group's advancement with the utilization of innovation, e) (e) Extend the deceivability of virtual individuals both inside the group and also outside the organization; f) (f) Help guarantee that individual colleagues do profit by the group.
2	Colfax, Santos, and Diego (2009)	To prove that virtual teams are a necessity in today's global, and increasingly even in regional businesses	The aftereffect of the study was the need to embrace and extend virtual authority, and in addition virtual correspondence, for the difficulties of customary methods for working together.
3	Ratcheva (2009)	The heterogeneous knowledge when compiled by geographically separated team members, hinder effective sharing and use of a virtual team's knowledge.	The creator found that fruitful combination of multidisciplinary information can be accomplished through the group's limit traversing exercises.
4	Balthazard et al. (2008)	To examine the role of e-leadership in mediating virtual group member interaction by comparing virtual and face-to-face teams.	The investigation uncovered those gathering individuals were for the most part firmer in up close and personal circumstances; acknowledged collective choices even more promptly; and showed a more prominent measure of collaboration than they did virtual groups.
5	Nauman et al. (2010)	The importance of the virtual team in the world business and globalization	They found that virtual groups can quickly react to business globalization challenges and that their utilization is growing exponentially.

6	Kelley and Sankeya (2008)	To find out if virtual projects if it can be more useful in certain contexts than those conducted by face-to-face teams	Their discoveries showed that time zone and social contrasts, specifically, influenced correspondence and group relations. Additionally, they reasoned that virtual groups are helpful for undertakings requiring cross-utilitarian or cross-limit gifted sources of info.
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3 Methodology

This study is using the quantitative analytical methodology in order to examine the readiness of managers to adopt e-leadership by analyzing the independent factors and digging into the results in relation to the independent variable. This chapter is explaining the steps undertaken in collecting the necessary information for the analysis of this study's objectives to be achieved. It is research conducted in Malaysia to identify and examine adopting e-leadership by managers and how ready they are to undertake it in their daily work life. Here we cover all aspects of research such as research design, unit, and level of analysis, sample size, sampling method, data collection, and analysis of everything related to this study.

3.1 Research Design

Using a quantitative analytical research in order to achieve the objective for answering the research questions of this research as being chosen to be conducted and a cross-sectional questionnaire as the tool of this research in order to gather the required data within a specific period of time to examine and investigate the managers' readiness to adopt e-leadership Malaysian companies.

3.2 Population of Study

From a statistical perspective, population indicates the sum of elements or components which the information is

meant for in any domain or inquiry. There are many sampling techniques such as cluster sampling and non-probability sampling. However, some techniques are not possible for many researchers due to their high cost. This research questionnaire is based on the previous one and the questions inside it are taken from previous studies (Cooper et al, 2008). The participants of this study are managers of 92 companies in Cyberjaya, Malaysia; therefore, this research will be prepared within allowable time and other resource constraints.

3.3 Unit of Analysis

The unit of analysis refers to the extent of accumulation of the information could be gathered for the duration of the information analysis stages (Sekaran & Bougie 2010). The unit of analysis of this study is a set of managers in Malaysian technology organizations in Malaysia. The study will be only focusing on factors that manager's use to display their readiness to adopt E-leadership factors in their daily work environments. Additionally, to test out different varieties of generations such as X, Y, Z who are managing and controlling organizations?

3.4 Research Sampling

Nonprobability and probability technique is used in this research as the sampling technique. The nonprobability technique is used here considering the cost not being expensive, highly used effectiveness, and requiring a larger population for the

sample size.

3.5 Questionnaire Development

This research questionnaire was developed and adapted from previous literature, which is designed to include multiple choice questions, fill in question and rank your answer questions following the Likert Five Scale. The questionnaire was drawn to elicit information/data on the manager's readiness to adopt E-leadership.

3.6 Pilot Study

Before conducting research procedures, especially in field research, it is advisable to conduct a pilot survey to identify the conditions under which the research will be conducted. According to (Hulley et al, 2007) pilot test is a small-scale preliminary study to assess feasibility, time, cost and adverse events, and to improve the design of the study before performing a large-scale research project. Besides, a total of 30 pilot study samples will be carried out before distributing a formal survey to the company's managers. The purpose of pre-test the questionnaire is to obtain significant feedback or revises from the respondents because they might help to identify anything difficulty or a confusing word within the questionnaire.

3.7 Data Collection Method

As important as it is for the research, it helps to determine if the data is inaccurate and may lead to misleading results and therefore it is important to determine the correct data type for this study. The data collection process was conducted from the 9th of September 2018 to 3rd of October 2018. A total of 190 copies of the questionnaire were distributed to managers of 72 companies in Cyberjaya, Malaysia. Out of 190 questionnaires distributed, 187 usable questionnaires were returned with

the response rate of 70%.

3.8 Primary Data

Primary data are collected in the search using several methods in which they will be collected using the questionnaire used by the researcher. This method is used as a survey to provide a standard calibration so that all those who respond to the same question are exposed to the same options for each questions' answer, which ultimately leads to ease of analysis and conclusion. Therefore, all the statistical data collected by descriptive statistical analysis will be processed in order to arrive at the results to be discussed in the fourth chapter.

3.9 Data Analysis

The collected data will be processed and analyzed through the use of the Statistical Package for Social Sciences (SPSS) to ensure a functional and appropriate set of data to analyses the hypothesis test in terms of the normal situation, as well as an analysis of the factors that will be conducted for this study using version 21 of the SPSS. Where data will be filtered and analyzed immediately after the collection has been completed.

4 Data Analysis and Findings

4.1 Questionnaire Return Rate

The researcher has targeted several 92 companies to distribute the questionnaire to give the assumption of 5 managers working at each company. Following Krejcie & Morgan (1970) sampling size table, the researcher also decided to use an online sample size calculator named "Raosoft.com" to confirm the sampling as well as picturing the sampling calculation. With a 90% confidence level, 92

companies as the population size, and a 70% response rate. It was found the questionnaire must be distributed to 72 companies. Therefore, given the assumption made by the researcher that

every company has at least 5 managers, it was found that 190 questionnaires are the minimum recommended sample size of the survey in order to get the correct answer as shown in the table below.

Table 6. Sample Size

Corporation population	Company sample size	Number of respondents (population)	Sample Size	Questionnaire distributed	Questionnaires returned	Return Rate %
92	72	460	190	190	187	70

4.2 Reliability Analysis

It means the extent to which the same results or similar results were obtained if the research was repeated in similar

circumstances using the same tool. In this study, the stability of the search tool was measured using the coefficient.

Table 7. Reliability & Validity Analysis (Pilot Study)

Cronbach's Alpha	No. of Questions	No. of Respondents	Reliability/Validity Value
.917	23	30	Excellent

According to the table above for Pilot Study, we notice that the Cronbach's Alpha is (.917) and the numbers of questions are (23), furthermore, the

numbers of respondents are (30) and the result of reliability/ validity value test is excellent.

Table 8. Reliability & Validity Analysis (Actual Study)

Cronbach's Alpha	No. of Questions	No. of Respondents	Reliability/Validity Value
.831	23	187	Good

From the table above for Reliability & Validity Analysis (Actual Study), it's clear that the Cronbach's Alpha is (.831) and the numbers of questions are (23), besides the numbers of respondents are 187 and the result of Reliability & Validity Analysis is good.

the study sample responded by demographic and personal variables. The table below shows that most respondents were male regarding gender variable, where they reached (63.6 %) with total frequency 119 while the percentage of females was (36.4 %) with frequency 68 out of the total respondents of the research sample. Hence, the proportion of males was higher than the proportion of females.

4.3 Demographic Analysis

The following study of characteristics of

Table 9. Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	119	63.6	63.6	63.6
	Female	68	36.4	36.4	100.0
	Total	187	100.0	100.0	

In regards to the age variable, we find that

category (30 - 39) occupied the highest

percentage of (36.4 %), this indicates that most of the respondents are young people, which explains why the majority of officials have the ability to work, give, innovate and develop continuously. Moreover, in the age group (40 - 49)

reached (26.7%), while the percentage of respondents in the age group (20 - 29) reached (21.4%) while the percentage of respondents and at the end, respondents who belong to the age group (more than 50) reached (15.5%).

Table 10. Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 – 29	40	21.4	21.4	21.4
	30 – 39	68	36.4	36.4	57.8
	40 – 49	50	26.7	26.7	84.5
	50 years and above	29	15.5	15.5	100.0
	Total	187	100.0	100.0	

As for the variable of generation group it was found that Generation X came out with (38.0 %), while generation Y respondents it was found (32.1%), Moreover, the Boomer generation was

(18.7), and Generation Z who born after 2000 its (7.5%) at the end Pre-Boomers (born before 1945) as it is the fewer respondents with (3.7).

Table 11. Generation Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pre-Boomers (born before 1945)	7	3.7	3.7	3.7
	Boomer generation (born 1946-1964)	35	18.7	18.7	22.5
	Generation X (Born 1965-1980)	71	38.0	38.0	60.4
	Generation Y (Born 1980-1990)	60	32.1	32.1	92.5
	Generation Z (after 2000)	14	7.5	7.5	100.0
	Total	187	100.0	100.0	

According to specialization respondents, we found that the high value was in Management with (29.4%), besides the respondents of Engineering were (17.1%).

On the other hand, the value of Service (16.0%). moreover, in finance was (15.5%), also in Science was (11.8%). And the fewer respondents came with others

such as Entrepreneurship, Consulting, International Management, and was (8.6%).

Table 12. Specialization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Management	55	29.4	29.4	29.4
	Facility of Service	30	16.0	16.0	45.5
	Science	22	11.8	11.8	57.2
	Finance	29	15.5	15.5	72.7
	Engineering	32	17.1	17.1	89.8
	Other	16	8.6	8.6	98.4
	Total	187	100.0	100.0	

As for the variable of job position the respondents, it was found that Operation Manager reached the percentage of (19.8 %) while Chief executive officer (CEO) reached the percentage of (16.0 %) and the respondents of General Manager was (14.4%), while Chief Technology Officer (CTO) was (11.8 %) and Manager of

human resource comes up with (11.2%), and the fewer respondents were with other's such as IT managers, etc. Thus, we conclude that Operation Manage the respondents are at a moderate level, and this is due to the reason for the high percentage of recipients of in the side of the job position.

Table 13. Job Position

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chief executive officer (CEO)	30	16.0	16.0	16.0
	General Manager	27	14.4	14.4	30.5
	Manager of human resource	21	11.2	11.2	41.7
	Financial Manager	17	9.1	9.1	50.8
	Operation Manager	37	19.8	19.8	70.6
	Chief Technology Officer (CTO)	22	11.8	11.8	82.4
	Chief Information Officer	19	10.2	10.2	92.5
	Other	14	7.5	7.5	100.0
	Total	187	100.0	100.0	

The table below shows that companies with a range of employees between 251 – 450 came in first with 32.6%, while 51 – 250 employees were (23.5%), at the same time employees 451 – 650 total respondents were (17.1%), Moreover,

managers who manage more than 651 employees were (13.9%), besides, the less percentage was back to manager's who managing less than 50 employees with (12.8).

Table 14. Number of Employees

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 50 employees	24	12.8	12.8	12.8
	51 - 250 employees	44	23.5	23.5	36.4
	251 - 450 employees	61	32.6	32.6	69.0
	451 - 650 employees	32	17.1	17.1	86.1
	More than 651 employees	26	13.9	13.9	100.0
	Total	187	100.0	100.0	

In terms of the current type of organization variable the researcher noticed that the high respondents were Private limited company with (42.2%), Moreover, Multinational (MNC) is (21.4%), also

Government/ Government Agency was (19.8%), besides public listed was (16.0%) and the less percentage was for Other's with (1%) such as mutual organization trade association.

Table 15. Type of Organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government/ Government Agency	37	19.8	19.8	19.8
	Private limited company	79	42.2	42.2	62.0
	Public listed	30	16.0	16.0	78.1
	Multinational (MNC)	40	21.4	21.4	99.5
	Other	1	.5	.5	100.0
	Total	187	100.0	100.0	

Managers working in companies that provide ICT services were the highest with 18.7%, while the Manufacturing sector came in second with (18.2%). Educational services with (17.6%), following that the

property Development/Construction with (17.1%) and facility Services with (15.0%) and finally managers working in the government sector came at the last with (13.4%).

Table 16. Type of Services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Facility Services	28	15.0	15.0	15.0
	Property Development/ Construction	32	17.1	17.1	32.1
	Manufacturing	34	18.2	18.2	50.3
	Education	33	17.6	17.6	67.9
	Government/Government agency	25	13.4	13.4	81.3
	ICT	35	18.7	18.7	100.0
	Total	187	100.0	100.0	

According to the table below the high respondent's percentage in the level of experience with using technology was Moderate with (42%), moreover, the second percentage was Extensive with (29%) and only (13%) who was Expert in

using technology. Besides, some managers as noticed above in type of generation their knowledge in using technology was minimal with (11.8%) and the less percentage was very rudimentary with (2.7%).

Table 17. Experience Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Rudimentary	5	2.7	2.7	2.7
	Minimal	22	11.8	11.8	14.4
	Moderate	79	42.2	42.2	56.7
	Extensive	55	29.4	29.4	86.1
	Expert	26	13.9	13.9	100.0
	Total	187	100.0	100.0	

According to communication method we noticed the high value came to the use of Telephone with (30.5%), moreover, the second value came with the use E-mail and was (23.0%), besides, use Mobile device was (13.4%), on the other hand, the use Video Conferences, R-HUB, WebEx,

GoMeetNow was (10.7%), at the same time the use (Fax 9.1%), and the respondents of Social media was (5.9%), also the value of Audio Conferences (2.7%) and the Instant Messaging was (2.7%), Other 1.6%.

Table 18. Communications Method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	E-mail	43	23.0	23.0	23.0
	Telephone	57	30.5	30.5	53.5
	Mobile Device	25	13.4	13.4	66.8
	Video Conferences, R-HUB, WebEx, GoMeetNow,	20	10.7	10.7	77.5

	GoToMeeting				
	Audio Conferences	5	2.7	2.7	80.2
	Instant Messaging	5	2.7	2.7	82.9
	Fax	17	9.1	9.1	92.0
	Social media	11	5.9	5.9	97.9
	Other	3	1.6	1.6	99.5
	Total	187	100.0	100.0	

Each manager prefers a certain way of interaction as mentioned below with the E-Leadership factors. The researcher found that 117 managers prefer to choose face to face interaction with 17.8%, while in the second place, 115 managers with 17.5% chose Face to face vs. virtual team.

Thirdly, 113 managers had to choose Media Richness with a percentage of 17.2%. Media richness vs. virtual team, Face to Face Interaction vs. Media Richness, and Virtual Teams came in last with the following percentages 16.7%, 16.6%, and 14.2% respectively.

Table 19. EL_Facctors Frequencies

		Responses		Percent of Cases
		N	Percent	
SE-Leadership FACTORS ^a	Face to Face Interaction	117	17.8%	62.6%
	Media Richness	113	17.2%	60.4%
	Virtual Teams	93	14.2%	49.7%
	Face to Face Interaction VS Media Richness	109	16.6%	58.3%
	Face to face vs. virtual team	115	17.5%	61.5%
	Media richness vs. virtual team	110	16.7%	58.8%
Total		657	100.0%	351.3%
a. Dichotomy group tabulated at value 1.				

Table 20. Case Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SE-Leadership FACTORS ^a	187	100.0%	0	0.0%	187	100.0%
a. Dichotomy group tabulated at value 1.						

a. Dichotomy group tabulated at value 1.

4.4 Descriptive Analysis

There were three sections in this study which included questions on the demographic characteristic of respondents,

independent variables which are face to face interaction, media richness, and virtual team. And another section is dependent variables which are manager readiness to adopt E-leadership. After

analyzing the data of the questionnaire questions, the researcher dealt with the results of the responses of the sample for the terms of the survey questions. After

unloading the questionnaire data in the SPSS program, the results were as shown as the following:

Table 21. Face-to-Face Interaction

Face to Face Interaction	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	St. Deviation	Relative Importance	Level of Acceptance
	N	N	N	N	N				
	%	%	%	%	%				
Q1	6	9	52	82	38	3.73	.947	6	High
	3.2	4.8	27.8	43.9	20.3				
Q2	3	7	39	86	52	3.95	.884	2	High
	1.6	3.7	20.9	46	52				
Q3	2	4	56	90	35	3.81	.798	5	High
	1.1	2.1	29.9	48.1	18.7				
Q4	3	11	41	88	44	3.85	.903	3	High
	1.6	5.9	21.9	47.1	23.5				
Q5	3	8	49	84	43	3.83	.886	4	High
	1.6	4.3	26.2	44.9	23				
Q6	2	3	31	100	51	4.04	.775	1	High
	1.1	1.6	16.6	53.5	27				
Total	187	187	187	187	187	3.8699	.61347	1	High
	100%	100%	100%	100%	100%				

The table above indicates that the total mean for the Face to Face interaction factor reached 3.8699 with high relative importance and standard deviation of .61347 which means that the response of

sample respondents in the understudy companies agree that managers are ready to adopt Face to Face Interaction in leading and interacting at work.

Table 22. Media Richness

Media Richness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	St. Deviation	Relative Importance	Level of Acceptance
	N	N	N	N	N				
	%	%	%	%	%				
Q1	59	74	13	28	13	2.26	1.245	5	Low
	31.6	39.6	7	15	7				
Q2	37	84	20	31	15	2.48	1.211	4	Medium
	19.8	44.9	10.7	16.6	8				
Q3	35	75	35	16	26	2.59	1.277	3	Medium
	18.7	40.1	18.7	8.6	13.9				

Q4	34	57	40	40	16	2.72	1.231	2	Medium
	18.2	30.5	21.4	21.4	8.6				
Q5	9	27	35	64	52	3.66	1.169	1	High
	4.8	14.4	18.7	34.2	27.8				
Total	187	187	187	187	187	2.7412	.98011	3	Medium
	100%	100%	100%	100%	100%				

In the table above as noticed that Factor two which is Media Richness with a total mean value of (2.7412) with a medium level of acceptance to use from managers and std. deviation of .98011 which mean

that the managers of companies are not satisfied to adopt Media Richness to be as a part of the communication method in their daily work life.

Table 23. Virtual Teams

Virtual Teams	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	St. Deviation	Level of Acceptance	Statement Representation
	N	N	N	N	N				
	%	%	%	%	%				
Q1	7	17	67	71	25	3.84	.964	2	High
	3.7	9.1	35.8	38	13.4				
Q2	5	20	45	101	16	3.55	.893	6	Medium
	2.7	10.7	24.1	54	8.6				
Q3	1	11	61	86	28	3.69	.817	5	High
	0.5	5.9	32.6	46	15				
Q4	2	10	47	93	35	3.80	.843	3	High
	1.1	5.3	25.1	49.7	18.7				
Q5	1	12	46	105	23	3.73	.778	4	High
	0.5	6.4	24.6	56.1	12.3				
Q6	2	7	44	89	45	3.90	.846	1	High
	1.1	3.7	23.5	47.6	24.1				
Total	187	187	187	187	187	3.6916	.62717	2	High
	100%	100%	100%	100%	100%				

As managers' always try to use an effective way in order to make the company simply run through using communication technology, the researcher noticed in the table above that virtual team factor reached 3.6916 with high relative

response of simple responded and the standard deviation of .62717 and that means managers of the company are ready to adopt Virtual team to be as a prominent work environment.

Table 24. Managers' Readiness

Managers Readiness	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	St. Deviation	Level of Acceptance	Statement Representation
	N	N	N	N	N				
	%	%	%	%	%				
Q1	3	4	51	82	47	3.89	.863	5	High
	1.6	2.1	27.3	43.9	25.1				
Q2	2	2	33	96	54	4.06	.777	1	High
	1.1	1.1	17.6	51.3	28.9				
Q3	3	4	43	81	56	3.98	.873	4	High
	1.6	2.1	23	43.3	29.9				
Q4	3	8	39	97	40	3.87	.852	6	High
	1.6	4.3	20.9	51.9	21.4				
Q5	1	5	34	98	49	4.01	.776	3	High
	0.5	2.7	18.2	52.4	26.2				
Q6	1	6	35	83	62	4.06	.834	2	High
	0.5	3.2	18.7	44.4	33.2				
Total	187	187	187	187	187	3.9786	.62563	1	High
	100%	100%	100%	100%	100%				

After analyzing the data of independent factors of e-leadership, the researcher will address at this point the results of dependent factor responses of managers and how ready they are to adopt e-leadership in their environment. It is shown above that the managers are ready to adopt e-leadership by showing a high level of acceptance at a mean value of

(3.9786) and standard deviation (.62563).

4.5 Normality Test

The researcher used the normality distribution test to test whether the data followed the normal distribution or not, and the results were as shown in the following tables:

Table 25. Normality test of Face-to-Face

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
FaceToFace	.129	187	.000	.907	187	.000
a. Lilliefors Significance Correction						

Table 26. Normality test of media Richness

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
MediaRichness	.135	187	.000	.935	187	.000
a. Lilliefors Significance Correction						

Table 27. Normality test of Virtual Team

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
VirtualTeams	.171	187	.000	.916	187	.000
a. Lilliefors Significance Correction						

Table 28. Normality test of Manager Readiness

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ManagerReadiness	.119	187	.000	.919	187	.000
a. Lilliefors Significance Correction						

It is clear from the results shown in the tables above that the significance values (Sig.) of these factors were less than the level of the statistical equation $\alpha = 0.05$, which means that the distribution of data for these factors does not follow the

normal distribution. Therefore, the coefficient of correlation (Pearson) will be used to answer the hypotheses of the study as shown in the following section.

4.6 Correlation Analysis

Table 29. Correlation analysis of Face-to-Face Interaction

		Managers Readiness
Face to Face Interaction	Pearson Correlation, r	.328**
	Significant, P	.000
	Frequency, N	187
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

H1 is accepted. There is a positive relationship with a p-value of (.000) and

the correlation coefficient of (.328**).

Table 30. Correlation Analysis of Media Richness

		Managers Readiness
Media Richness	Pearson Correlation, r	.082
	Significant, P	.267
	Frequency, N	187
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

AS the researcher found that the correlation between the factor and there is no relationship, therefore, hypothesized the following:

H20: There is no relationship between media richness and the managers' readiness to adopt e-leadership as the

equation $\alpha > 0.05$.

H21: There is a positive relationship between media richness and the managers' readiness to adopt e-leadership as the equation $\alpha \leq 0.05$.

As shown in the table above, the researcher concluded that there is no

relationship between media richness and managers' readiness to adopt e-leadership where p-value is bigger than 0.05 with a value of p (0.267), therefore, the researcher rejected the alternative hypothesis (H21) and accept the Zero hypothesis (H20), and therefore the

hypothesis is rejected. There is no relationship with a p-value of (.000) and the correlation coefficient of (.082).

H2: The hypothesis is rejected. There is no positive relationship at P value (.360) and a correlation coefficient of (.067).

Table 31. Correlation analysis of Virtual Team

		Managers Readiness
Virtual Team	Pearson Correlation, r	.471**
	Significant, P	.000
	Frequency, N	187
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		

H3 is accepted. There is a positive relationship with a p-value of (.000) and

the correlation coefficient of (.471**).

4.7 Hypotheses Testing

Table 32. Variables Regression Equation

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	VirtualTeams	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	FaceToFace	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
a. Dependent Variable: ManagerReadiness			

The table above shows the names of the variables introduced in the regression equation, which are only two variables

(Face-to-Face and Virtual Teams), and the method of excluding the variables in a gradual manner.

Table 33. Regression - Model Summary

Model Summary ^c				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.471 ^a	.222	.218	.55324
2	.471 ^a	.279	.271	.53413
a. Predictors: (Constant), virtual teams				
b. Predictors: (Constant), VirtualTeams, FaceToFace				
c. Dependent Variable: ManagerReadiness				

The table above shows the correlation coefficient (R) between the dependent variable and the independent variables in

the second column (.471a, .471a), the Square correlation coefficient (R2) in the third column (.222, .279), the Square

adjusted correlation coefficient (Adjusted R²) in the fourth column (.218, .271), and Std. Error of the Estimate (.55324, .53413). Thus, the independent variables

(Face-to-Face and Virtual Teams) are explained by the variance of the dependent variable, which is a significant value.

Table 34. ANOVA regression analysis

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.180	1	16.180	52.862	.000 ^b
	Residual	56.624	185	.306		
	Total	72.803	186			
2	Regression	20.309	2	10.155	35.593	.000 ^c
	Residual	52.494	184	.285		
	Total	72.803	186			
a. Dependent Variable: ManagerReadiness						
b. Predictors: (Constant), virtual teams						
c. Predictors: (Constant), VirtualTeams, FaceToFace						

The above table shows the results of the ANOVA regression analysis. We note that the value of F = (52.862, 35.593) with a significant value (Sig.) = 0.000 is smaller than 0.05 and therefore we reject the null hypothesis and accept the alternative hypothesis that the regression is not significant and therefore there is a relationship between the dependent

variable and the independent variables (Face-to-Face, Virtual Teams).

But we do not know specifically which independent variable that added a fundamental explanation of the variance in the dependent variable; therefore, we go to a table detailing regression equation coefficient to make it clear to us.

Table 35. Regression Coefficients

Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.243	.242		9.260	.000			
	VirtualTeams	.470	.065	.471	7.271	.000	.471	.471	.471
2	(Constant)	1.462	.311		4.703	.000			
	VirtualTeams	.422	.064	.423	6.616	.000	.471	.438	.414

	FaceToFace	.248	.065	.243	3.805	.000	.328	.270	.238
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a. Dependent Variable: ManagerReadiness

The table above shows the regression coefficients that help to obtain the regression equation between variables.

The regression line equation = Predicted Y
(: Managers'Rediness) = 2.243 + 0.470
(Virtual Teams)

The regression line equation = Predicted Y

(: Managers'Rediness) = 1.462 + 0.248
(Face-to-Face)

The data of the previous table indicate that the variables with statistical significance are (Face-to-Face, Virtual Teams) as shown by the significance level (Sig.) = (0.000).

Table 36. Regression - Excluded Variables

Excluded Variables ^a						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	FaceToFace	.243 ^b	3.805	.000	.270	.960
	MediaRichness	.014 ^b	.207	.836	.015	.979
2	MediaRichness	.032 ^c	.505	.614	.037	.973
a. Dependent Variable: ManagerReadiness						
b. Predictors in the Model: (Constant), virtual teams						
c. Predictors in the Model: (Constant), virtual teams, FaceToFace						

The table above shows the names of the variables that were excluded in the gradual manner, which is a variable (Media Richness) since the partial correlation between it and the dependent variable is not statistically significant as shown by the value of (Sig.) in the table.

5 Discussion and Conclusions

In this chapter, the researcher will discuss the finding and provide some suggestions and recommendations for other interested researcher based on this topic. This chapter also provides the relevant result analysis to fulfill the objective of this research which is stated early in the first chapter.

5.1 Summary of Findings

As stated in chapter one, this study was conducted to examine the readiness of managers in Malaysia to adopt e-

leadership. The research has given a brief background of the country and companies in general. The first chapter has also started with an introduction prior to a discussion of the background of the study and to determine managers performing through using E-leadership roles. The research also presented a discussion on the factors that influence managers to adopt e-leadership. The problem statement, objectives, research questions, scope and definition of terms were also highlighted in this chapter. Chapter two has presented the research's literature review. The discussion started with an explanation of e-leadership in compare with the traditional leadership as well as getting into details with the variables of the study that influence managers to adopt e-leadership. It was followed by an analytical discussion of the previous studies conducted on e-leadership and its factors. In chapter three, the chapter

presented the methodology used to collect the data for this research, through survey questionnaires. The research was conducted in Malaysian companies through field visits and online forms. The data was collected and analyzed using SPSS V21.0. Chapter four contains the analysis and discussion of the research findings to answer the research questions and hypotheses of the study.

5.2 Reliability and Validity

According to the results, the study conducted was found reliable and valid (Excellent) at the level (.831) of Cronbach's Alpha coefficient.

5.3 Variables of the Study

There are four variables; three of them are independent which are face-to-face interaction, media richness, and a virtual team that influences the dependent variable which is managers' readiness to adopt e-leadership. The results indicate that independent variables show different levels of acceptance, where face-to-face interaction was the highest with a mean value of 3.8699 with a high relative importance as well as virtual team in second with a mean value of 3.6916, while media richness in third shows a medium level of acceptance with a mean value of 2.7412. On the other hand, the dependent variable shows a high level of acceptance with a mean value of 3.9786.

5.4 Discussions of Objectives/Hypotheses

The study came up with 3 different objectives to examine the influence of face-to-face interaction, media richness and virtual team towards managers' readiness to adopt E-leadership. Therefore, the study hypothesized that there is a positive relationship between the

independent variables and the dependent variable in order to achieve the objective. It was found that the two variables (face-to-face interaction and virtual team) have a positive relationship with the dependent variable with a significant value (0.000) with a correlation value (.328**) and (.471**) respectively which indicates that they have an impact on managers' readiness to adopt e-leadership, while the independent variable (media richness) shows a significant value ($0.267 > 0.05$) at a correlation value (0.82) which states that there is no relationship between the two variables and therefore the independent variable has no impact on the dependent variable.

5.5 Practical Contributions

The study is important from both scientific and practical perspectives for researchers and scholars in business administration. This research will provide Malaysian companies, managers and other stakeholders with important data and insights on current state and practice of e-leadership as well as traditional leadership. The study findings could improve managers with the necessary information regarding leadership in general.

5.6 Research Limitations

The present study does not go without limitations; however, they give direction for future studies. There are several limitations to this study, which will be highlighted together with the recommendations for future research or studies. Firstly, there was a lack of similar past research regarding this topic making it difficult to compare and refer results with other past studies, especially in Malaysia. Secondly, the small number of respondents for this research may result in sampling errors, as it may not represent the whole

population at the high education sectors. The scope was limited to managers only in Malaysian companies.

5.7 Recommendations

This study might pave the way for further studies on the level e-leadership. Further studies could be carried out to identify other factors that may impact managers to adopt e-leadership.

6 References

- Fryer, M. (2011). A Review of the Leadership Literature. *Ethics and Organizational Leadership*, 13-34. doi:10.1093/acprof:oso/9780199590186.003.0002
- Avolio J. Bruce & Kahai S. Surinder. (2003). Adding “E” to E-Leadership: How it may impact your leadership. *Organizational Dynamics*, Vol. 31, No 4, 325-338.
- Kouzes, J. & Posner, B. (2007), “The Leadership Challenge”, 4th edition, Jossey-Bass: San- Francisco.
- Janet Sternberg (2012). *Misbehavior in Cyber Places: The Regulation of Online Conduct in Virtual Communities on the Internet*. Rowman & Littlefield. p. 50. ISBN 978-0-7618-6011-2. Retrieved 4 June 2013
- Wolfeld, L. R. (2010). Effects of office layout on job satisfaction, productivity and organizational commitment as transmitted through face-to-face interactions. *Colonial Academic Alliance Undergraduate Research Journal*, Volume 1, Article 8.
- Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness, and Structural Design. *Management Science*, 32(5), 554-571. doi:10.1287/mnsc.32.5.554
- Lilian, S. C. (2014). Virtual Teams: Opportunities and Challenges for e-Leaders. *Procedia - Social and Behavioral Sciences*, 110, 1251-1261. doi:10.1016/j.sbspro.2013.12.972
- Kutlu, Birgul, Bozanta, Aysun, & Nowlan, Nuket. (2013). Multi-User Virtual Environments and Serious Games for Team Building in Organizations. Paper presented at The International Conference on E-Learning in the Workplace 2013, New York, USA.
- Van Wart, Montgomery, 2015. Evaluating transformational leaders: the challenging case of Eric Shinseki and the VA. *Pub. Admin. Rev.* 75 (5), 760–769.
- Gibson, C. and Cohen, S. (2003). *Virtual teams that work: Creating conditions for virtual team effectiveness*. San Francisco: Jossey-Bass.
- Wart, M. V., Roman, A., Wang, X., & Liu, C. (2017). Integrating ICT adoption issues into (e-) leadership theory. *Telematics and Informatics*, 34(5), 527-537. doi:10.1016/j.tele.2016.11.003
- Zaccaro, S. J., and Bader, P. (2003). E-leadership and the challenges of leading teams: Minimizing the bad and maximizing the good. *Organizational Dynamics*, 31(4), p.377-387.
- William J. Schroer (2008). Generations X, Y, Z and the Others, *The Journal of the Household Goods Forwarders Association of America, Inc*, Vol. XL, pp. 9-11.
- Annunzio, S. (2001). *leadership: Proven techniques for creating an environment of speed and flexibility in the digital economy*. New York:

- Free Press.
- Tay Angeline, 2011, "Managing Generational Diversity at the Workplace: Expectations and Perceptions of Different Generations of Employees, African Journal of Business Management, Vol. 5(2), pp. 249-255, 18 January 2011
- Gursoy, D., Maier, T. & Chi, C. (2008). Generational Differences: An Examination of Work Values and Generational Gaps in the Hospitality Workforce. *International Journal of Hospitality Management*, Vol. 27, pp. 448-58
- Alberto Silv, (2016), What is Leadership? *University Journal of Business Studies Quarterly* 2016, Volume 8, Number 1, ISSN 2152-1034.
- Bunmi Omolayo, Effect of Leadership Style on Job-Related Tension and Psychological Sense of Community in Work Organizations: A Case Study of Four Organizations in Lagos State, Nigeria, *Bangladesh e-Journal of Sociology*, 4(2), July (2007)
- Timothy, C., O., Okwu, A., T., Akpa, V., O., & Nwankwere, I., A. (2011). Effects of leadership style on organizational performance: A survey of selected small-scale enterprises in Ikosi. *Australian Journal of Business and Management Research*. Vol.1, No.7, 100-111.
- Khan, S. (2010). Impact of authentic leaders on organization performance. *International Journal of Business and Management*. Vol.5, No.12.
- Bass B. M. (1997), the ethics of transformational leadership, *KLSP: Transformational Leadership*, Working Papers
- Leadership Styles 2012: Choosing the Right Approach for the Situation. (n.d.). Retrieved from http://www.mindtools.com/pages/article/newLDR_84.htm
- Ocker, Huang, Trauth, & Purano. (2007). The tension between expectations of availability and the reality of availability in hybrid teams. *International Federation for Information Processing*, 236, pp. 119-131.
- Avolio, B., & Kahai, S. (2010). Leading organizations. In G. R. Hickman (Ed.), *Perspectives for a new era* (p. 239). Thousand Oaks, CA: SAGE Publications, Inc.
- Parasuraman, A., & Colby, C. L. (2014). An Updated and Streamlined Technology Readiness Index. *Journal of Service Research*, 18(1), 59-74. doi:10.1177/1094670514539730Dwivedi, Y. K. (n.d.) (2016).
- Monika Bansal, (2008). TRADITIONAL leadership Vis-A-Vis E leadership, http://www.dbr.shtr.org/V_9n2/v9n2i.pdf
- Delhi Business Review X Vol. 9, No. 2
- Caison A L, Bulman D, Pai S and Neville D (2008), "Exploring the Technology Readiness of Nursing and Medical Students at a Canadian University", *Journal of Interprofessional Care*, Vol. 22, No. 3, pp. 283 294.
- Meuter, M., M. Bitner, A. Ostrom, and S. Brown. (2005). Choosing among alternative service delivery modes: An investigation of customer trial of self-service technologies. *Journal of Marketing* 69: 61- 83.
- Astut, N. C., & Nasution, R. A. (2014). Technology Readiness and E-Commerce Adoption among Entrepreneurs of SMEs in Bandung City, Indonesia, 6(1), 69-88. Retrieved February 9, 2016, from

- <http://eds.a.ebscohost.com/newdc.oum.edu.my/eds/pdfviewer/pdfviewer?sid=61e9e84e-e341-479f-b48b-ba482ab6270f@sessionmgr4005&vid=1&hid=4208>.
- Nunamaker, J. F., Reinig, B. A., & Brigg R. O. (2009). Principles for Effective Virtual Teamwork. *Communications of the ACM*, 52, 113–117. <http://dx.doi.org/10.1145/1498765.1498797>
- Raisinghani, M., Arora, A., Baylor, E., Brown, P. S., Coleman, C., & Craig, K. (2010). Virtual Project Management of Globally Outsourced IT Projects. *International Journal of Management and Information Systems*, 14, 1–7.
- TPOFTF 2015, The Power of Face-to-Face Communication in a Digital World. (n.d.). Retrieved from <https://articles.mercola.com/sites/articles/archive/2015/10/08/face-to-face-meetings.aspx>
- Bergin, Richard 2015, Media Richness. *Journal, Department for Homeland Defense and Security*
- Torres-Coronas, T., & Arias-Oliva, M. (2009). Encyclopedia of human resources information systems: Challenges in e-HRM. Hershey, PA: IGI Global.
- Arsilan, A., & Staub, S. (2012). Theory X and Theory Y Type Leadership Behavior and its Impact on Organizational Performance: Small Business Owners in the Şişane Lighting and Chandelier District. *SSRN Electronic Journal*. doi:10.2139/ssrn.2181347
- Smola, K.W. & Sutton, C.D. (2002). Generational Differences: Revisiting Generational Work Values for The New Millennium. *Journal of Organizational Behaviour*, 23 (4), pp. 363-82.
- Zemke, R.; Raines, C. & Filipczak, B. (2000). *Generations at Work: Managing the Clash of Veterans, Boomers, Xers, and Nexters in Your Workplace*, New York: AMACOM.
- Adecco (2015). Generation Z vs. Millennials, available at <http://pages.adeccousa.com/rs/107-IXF-539/images/generation-z-vs-millennials.pdf>, accessed 07.04.2016.
- Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610
- Donald R. Cooper, P. S. S. (2008). *Business Research Methods* (10th ed.). Irwin: McGraw Hill.
- Sekaran, U. & Bougie. R (2010) *Research Methods for Business: A Skill Building Approach* John Wiley & Sons