IS WHATSAPP THE FUTURE OF WORKPLACE COMMUNICATION?:
INVESTIGATING THE USE OF WHATSAPP IN DECISION-MAKING EPISODES

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ABSTRACT

Background and Purpose: Meetings, emails, phone calls and mobile telephone texts are often quoted as the primary methods of communication in the workplace settings. However, the rise of mobile messaging service has been superseding the use of these modes of communication. Hence, it is not surprising that messaging applications like WhatsApp has slowly replaced the transmission of messages in most workplace interaction. WA, the prominent global mobile messenger application (statistica.com) does not only allow users to send personal messages to others rapidly but also makes it possible for them to communicate in groups where the users can communicate interactively and achieve tasks swiftly.

Methodology: Drawing on WA group messages and audio recordings of meetings of team meetings, this work analyses the impact of WA on internal team communication by focusing on the processes of decision-making displayed by the members of a group of academics at an institution of higher education in Malaysia.

Findings: The analysis shows that the application functions as a useful platform for the team to negotiate solutions, make and revisit decisions that were previously decided in another interactional context.

Contributions: This paper concludes that the use of WA constitutes a daily reality in the investigated workplace, illuminate the intertextuality of DM processes across these contexts, and that it is reflective of its main purposes: to make quick decisions, give confirmation or approval, and provide information
regarding the issues raised. The study also addresses the crucial question: is WA the future of workplace communication and will it become the preferred medium for decision-making?

**Keywords:** Decision-making, higher education, Malaysia, WhatsApp, workplace discourse.

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**1.0 INTRODUCTION**

It is fascinating to observe that the communication in today's world occurs prevalently on virtual communication, such as on social media sites and messaging applications (henceforth app) such as Facebook, Twitter and WhatsApp (henceforth WA). The introduction of these communication services have made it possible to send an unlimited number of messages and communicate with geographically distributed members instantly and for free (Zimmerman, Wit, & Gill, 2008; Skovholt, Grønning, & Kankaanranta, 2014; Darics, 2016, 2017). With the prevalent use of these communication media in many workplaces today, it is not surprising that work tasks are realised through written communication, and members officially engage in and achieve complex communication goals from behind their keyboards and computer screens.

The strengths of this technology are evident in several recent academic studies of WA. Researchers found that WA is used as a tool for sharing knowledge amongst colleagues (Johnston et al., 2014; Abdullah, Mohd Tahir, & Mohd Said, 2014; Daud, 2014; Haque, Ahlan, & Mohamed Razi, 2015), sharing data between professionals and clients (Petruzzi & De Benedittis, 2016), and as a tool for learning facilitation between teachers and students (Bouhnik & Deshen, 2014). All of these services reflect the effects of changing technology on communication, in which technology has become the ‘core medium of communication in many social communities’ (Sánchez-Moya & Cruz-Mayra, 2015, p. 52). In Johnston et al.’s (2014) study that evaluates the use of WA in emergency surgical teams, it was found that WA represents a ‘disruptive innovation’ in healthcare communication (p. 2). The use of WA is regarded as ‘appropriate with the nature of the team’s emergency workload that involves the rapid assessment, management and discharge of patients’ (Johnston et al., 2014, p. 3). As well as allowing users to send personal messages to others, WA makes it possible for them to create groups where they can communicate interactively through photos, videos, audio messages, links, contacts and location-sharing, free of charge. Darics (2017), on the other hand, introduces
the terms 'e-leaders' and 'e-leadership' when referring to the leaders who lead via digital channels and the ensuing leadership activities. Providing empirical evidence from instant messaging (henceforth IM), she demonstrates how transactional and relational workplace tasks are achieved by looking at non-verbal language such as orthographic and typographic means in online communication.

Considering the vast functions of online interactions in workplace communication, it is imperative to expose a range of decision-making (henceforth DM) processes and shed light on how exactly people make decisions in digital environments. The exploration of DM in online interactions is especially relevant for business meetings; DM in that context does not only take place face-to-face but also in a wide variety of online situations, which are as demanding as verbal interactions. According to Cameron (2001, p. 2), ‘technological change does not only produce new methods for analysing discourse but also produces new kinds of discourse’. Discourse in WA is one of these new kinds of discourse.

Guided by the call issued by Darics (2017) to venture into the world of online communication, this exploratory study aims to analyse DM over WA and to observe how a team negotiates and makes decisions online. This study’s choice of setting contributes greatly to workplace discourse studies, as, to date, little research has been conducted on one of the world’s leading communication platforms, WA. This research will answer the research question as in the following: How are decisions discursively 'made' in the investigated team on WhatsApp?

2.0 LITERATURE REVIEW

2.1 Whatsapp

Whatsapp, is one of the instant messaging applications that operates across most smartphones and tablets via a connection to the Internet. Its speed in transmitting messages has enormously facilitated the way people communicate with each other (Sutling, Mansor, Widyarto, Lecthmunan, & Arshad, 2015). WA is claimed to be the ‘most well-run instant messaging service available, and handles more instant messages in a day than the entire global short messaging system industry’ (Sutling et al., 2015, p. 225). Despite the growing number of mobile messaging services, such as Viber, Line, KakaoTalk, Snapchat, WeChat and Tango around the globe, WA continues to be the most popular app on the list. This is confirmed by a statistic that proves that WA is ranked as the most popular global mobile messenger app, with more than 1300 million monthly active users worldwide as of January 2018. A study by Church
and Oliveira (2013) discovered that WA is the preferred app for sending text messages due to a range of factors including cost, community, privacy, reliability, and simplicity.

Today, WA is not only accessible through mobile phones but it can also be used as a web browser, where one can send and receive WA messages from one’s computer. Also known as WhatsApp Web, the use of WA on the computer desktop has made the messaging experience more convenient by eliminating the need to recheck one’s phone while working on a computer. With its widespread uptake, it is believed that the use of WA in the workplace allows staff to interact at a faster rate compared to using email. Users can communicate in groups where multiple users can participate and monitor the conversations (Johnston et al., 2014). Through WA, information and feedback can be exchanged immediately, and the management of tasks can be achieved swiftly (Johnston et al., 2014).

It is important to note that online communication tools such as WA do not only enable real-time chat, but they can also ‘preserve a record of the interaction that can be accessed later’ (Herring & Androutsopoulos, 2015). In other words, users can access messages that they have missed previously and reply to them at their convenience. With this feature, WA provides an opportunity for discourse analysts to analyse the decision-making processes during, after and, the processes while waiting for the decisions to be finalised. Analysts are able to point, for instance, the duration that the team takes to finalise a decision and the processes of decisions are being made.

The data of this study include the collection of the WA messages exchanged among the investigated team committee. The team under scrutiny has its own online group on WA that it regularly uses to interact, discuss issues, gain prompt feedback and even make decisions for issues relating to the tasks they are working on.

2.2 A Continuum of Decision-Making (DM) Processes
One useful way of comparing the different degrees of DM processes is to place them along a continuum (see Figure 1). ‘Traditionally, decisions have been grouped according to the method of decision making adopted by participants (i.e. decisions made by consensus, majority, voting, etc.)’ (Marra, 2003, p. 152). Similarly, the DM categories in this paper are grouped based on the ways decisions are arrived; the distinguishing categories of the DM processes from my dataset make use of four groups. The categories range from straightforward, relatively straightforward, complex to highly complex DM categories and as well as emerging from the dataset, they were referred to from past studies (Janis & Mann, 1977; Marra, 2003).
Straightforward processes refer to the simple structure of processes where decisions are achieved with little negotiation. This category is on the left hand side of the continuum, while at the other end of the continuum are the highly complex decisions. Highly complex processes have the opposite characteristics. Decisions are reached within a longer period of time, involving repetitive stages and lengthier negotiations. Fairly straightforward and complex decision processes are positioned in the middle of the continuum as they combine elements of the processes nearest to their positions. By placing these types of DM processes in a continuum, it is assumed that characteristics of these processes are not exclusive and fixed to each category, but rather interrelated and non-discrete.

Figure 1: Continuum of decision-making processes

In Table 1, we have listed the detailed characteristics and features of each of the categories derived from the WA and face-to-face meetings, with reference to the literature (Janis & Mann, 1977; Marra, 2003; Svennevig, 2008). The proposed processes of DM, nonetheless, remain an open issue which future research in DM should clarify, confirm and test, in order to continue exploring the complexities of DM.
Table 1: Characteristics and features of each of the categories in decision-making episodes

| DM process Characteristics | Straightforward | Fairly straightforward | Complex | Highly complex |
|---------------------------|-----------------|------------------------|---------|----------------|
| a) Length of turns        | Meetings:       | Meetings:              | Meetings: | Meetings:      |
| b) Length taken to reach decisions | Short and neat turn sequences | Slightly longer but still within neat turn sequences | Scattered turns | • Scattered turns |
|                           | WA: the issue is resolved within the same day, in a short timeframe | WA: the issue is resolved within the same day, with a slight delay (which is partly due to a delayed response time between posts) | WA: the issue(s) take more than a day to be resolved (which is partly due to a delayed response time between posts) | • WA: the issue(s) take more than a day to be resolved |
|                           | • Linear | • Linear | • Cyclical / reversion (Janis & Mann, 1977) | • Cyclical / reversion (Janis & Mann, 1977) |
|                           | • A single issue | • A single issue | • Issue(s) is re-raised | • Issue(s) is re-raised |
|                           | • One or more solutions are proposed | • One or more solutions are proposed | • More than one solution |
| Ratification | **Meetings and WA:** | Meetings: | Meetings: | Meetings: |
|--------------|---------------------|-----------|-----------|-----------|
|              | **Announcement**    | • Announcement | • Announcement | • Announcement |
|              | **Summary**        | • Summary | • Summary | • Summary |
|              |                    | • Ratification may be absent or implicit | • Ratification may be absent or implicit | • Ratification may be absent or implicit |
|              |                    | • Other complex nonverbal cues (i.e. notetaking, topic shift, acknowledgement token) (i.e. Mhmm mhmm) and significant silence (Marra, 2003, p. 77) | • Other complex nonverbal cues (i.e. notetaking, topic shift, acknowledgement token) (i.e. Mhmm mhmm) and significant silence (Marra, 2003, p. 77) | • Other complex nonverbal cues (i.e. notetaking, topic shift, acknowledgement token) (i.e. Mhmm mhmm) and significant silence (Marra, 2003, p. 77) |

- A ratification (Marra, 2003, p. 77).
- May or may not include implementation of solution.
- More than one implementation of the proposal.
- A ratification (Marra, 2003, p. 77).
- A ratification may be absent or implicit.
| 4. Number of decisions | Single decision/ speedy decision (Marra, 2003, p. 153) | Single decision | More than one, including emergent decisions | More than one, including emergent decisions |
|------------------------|------------------------------------------------------|----------------|---------------------------------------------|---------------------------------------------|
| WA:                    | token (i.e. Mhmm mhmm)                               | 108)), proposal of implementation | WA:                                         | 108)), proposal of implementation |
|                        | WA:                                                  |                  | • Emoji                                     | • Emoji                                     |
|                        | • Emoji                                              |                  | • Actual implementation                     | • Actual implementation                     |
|                        | • Actual implementation of decision                  |                  |                                             |                                             |

421
For the purpose of this paper, we will only discuss on two types of DM processes, namely fairly straightforward and highly complex. These two types of DM processes are chosen as they are deemed to best represent the intertextuality of DM processes across two contexts, namely WA and face-to-face meetings. The next section describes the methodology for this study.

3.0 INTRODUCTION TO THE WORKPLACE AND THE TEAM

The chosen setting for my research is a higher education institution situated in Malaysia. The settings involved have the following pseudonyms: the faculty involved is be labelled NAS, the department involved is referred to as FAN, and the working team that is the main focus in the study is named the TEFL committee.

The TEFL team is one of the inter-departmental committees within FAN. The team comprises six participants that include the formal team leader, Sarah, and the team members, Zana, Syahira, Irene, Eusof and Wani. The age of the participants ranged from 28-50 years. All members have been working in FAN for more than five years. However, Eusof is the most recent member who joined the department and the committee in July 2015. With the exception of Eusof, all the members have held many positions at the management and departmental level. These positions include Head of Department, Deputy Dean, Quality Assurance Coordinator and heads of several committees.

The variety of roles and positions held by the participants is what makes the team unique. Their different experiences and areas of expertise contribute to the team’s dynamics and accelerate the execution of some of the tasks assigned to them. The team’s task is to manage all academic matters of a particular group of students, pseudonym as the TEFL students. Their main responsibilities include managing the students’ teaching placement programme (henceforth TP) and revising the TEFL course for prospective and current students’ use. These tasks are crucial, as they further the objectives of the department. As the appointed leader, Sarah has assigned the former task to Irene and Eusof, while Syahira works with her on the latter task. Nonetheless, the group still works as a committee in which the discussions and decisions are made collectively. Most of the times, the execution of these tasks, however, is the responsibility of the person in charge of them.

3.1 Gathering WA Messages

The methodological design in gathering WA messages is parallel with the participatory method utilised by Holmes, Marra, and Vine (2011) in face-to-face meetings data. All the participants
were given complete control over the messages, and the power to either allow or restrict the use of those messages in the study.

To gain access to the WA messages, we asked for the leader’s permission to let me in. Not long after that, one of the researchers was included in the group. Her role in the group was as a passive observer and she did not participate in their group chat. With the ‘blue ticks’ feature, WA provides delivery notifications, which show when a message is sent, delivered and read by the recipients. Due to this feature, she decided to read new messages a few hours after interactions occurred to lessen the participants’ awareness of being observed. Doing this may also reduce the observer’s paradox within this platform. After collecting a considerable number of messages from October 2015 to late February 2016, she was removed from the group by Sarah, i.e. the formal leader.

The chat conversations are mainly revolved around their assigned tasks, with small talks that occurred regularly. The data were kept secure in several different virtual stores, such as in the researcher's personal and workplace email accounts. I would email the chat conversations to these accounts after the group had exchanged a considerable number of text messages. The WA data amounted to 1664 posts comprising text messages with photos, images and emoji.

3.2 Recording Meetings

Meetings interactions are the secondary data for this research. Similar to WA messages, the discussions on this setting are mainly to further the tasks assigned to the committee. The data were collected through video and audio recordings to capture real-time meeting interactions. ‘Cameras have the power to keep a record of temporal and kinesic features hence allowing us to focus on what is sometimes a very small detail at the time, such as a particular sound or a person’s small gesture’ (Duranti, 1997, p. 116). This, according to Saferstein and Sarangi (2010, p. 398), is also known as the ‘semiotic modes of representation’. Even though the current study does not focus on any specific paralinguistic features, the minute details of the interactions have helped us by providing a more accurate view on how they do DM. The use of recording devices has proved to be vital in analysing workplace interactions, as extensively demonstrated by other researchers such as Mullany (2007), Schnurr (2009), Angouri and Marra (2010), Svennevig (2011), Wodak, Kwon, and Clarke (2011), and Clifton (2017) to name a few.

The data from all four meetings are based on the video recordings with a combined duration of 5 hours and 45 minutes. All meetings that were recorded were semi-formal in nature and were held in the meeting room. They were filmed with two cameras placed diagonally in
two corners of the meeting room. Meanwhile, an audio recorder was placed on the table positioned close to the participants’ seats. The recording equipment were prepared before the participants arrived and removed after they had left the room. By doing this, the researchers’ involvements during the recording sessions were minimised and less disruptive.

The main medium of instruction for both data was primarily the local and neighbouring dialects, although code-switching in Malaysian English occurred throughout the discussions on WA and in meetings.

### 3.3 Translating The Data

It is important to note that translation is a limitation of the study. Some translated words may not indicate the exact meaning of the original word, and this may relatively affect the analysis by making the data less authentic. Nevertheless, we tried our best to find the equivalent words when translating by referring to several reputable Malay language online resources and repositories. The resources include the *Dewan Bahasa dan Pustaka*, which is the government body for matters pertaining to the Malay language and the publisher of the prestigious dictionary of the Malay language. Apart from that, we have also referred the translated extracts to a proofreader, who is a native speaker of the local dialect and a former member of staff at the investigated context. The extracts were also proofread by a native speaker of English to ensure that the translations are understandable to the readers.

The selected extracts that have been analysed were transcribed into detailed transcripts using transcription notation, namely Conversation Analysis, combining some aspects from the convention used by Language in the Workplace Project. Language in the Workplace Project is research projects researching on workplace discourses using authentic conversations by research teams at Victoria University of Wellington. Considering that we would be presenting some translation texts for our data, we selectively chose the symbols from these conventions that best represent our data and ensured that they were well formatted. This was done so that the transcripts are visually neat and pleasing as well as easy to follow.

### 4.0 ANALYSIS

#### 4.1 Fairly Straight-Forward DM Processes

Example 4.1

Context: This discussion takes place in the WA group. Zana asks whether any of the members have upcoming classes with the TEFL students, so that she can pass a particular form to the respective staff member to disseminate to the students.
17. 19/10/2015, 4:06 pm Zana: *sape ada kls ngan tefl tmrw? nk kna dorang isi IC no*  
who has class with tefl tmrw? need to ask them to fill in their identity card (ic) number

18. 19/10/2015, 4:08 pm Sarah: *Takde kakzana, tapi blh je suh dorang dtg ofis isi since kita semua tadop esok*  
No one kakzana, but can ask them to fill in at the ofis since all of us will not be here tomorrow

19. 19/10/2015, 4:12 pm Zana: *ok. we nd ic no 2 send our litter 2 education state department. our office doesnt hv this info*  

20. 19/10/2015, 4:13 pm Zana: *i wl leave it with [name of a person]*  

21. 19/10/2015, 4:18 pm Zana: *all 99 of them*  

22. 19/10/2015, 4:18 pm Zana: *[A photo of the form attached]*  

23. 19/10/2015, 5:16 pm Sarah: *Ok kak zana, i ll inform tefl students to do the needful.*  

24. 19/10/2015, 5:20 pm Zana: *but d prblm is edok opis kita xdok org*  
*but d prblm is tomorrow nobody will be at the office*  

25. 19/10/2015, 5:20 pm Zana: *cn u ask sorang 2 gt it frm.me 2day? b4 6.30*  
*cn u ask someone 2 get it frm.me 2day? b4 6.30*  

26. 19/10/2015, 5:21 pm Sarah: *Hmm [name of a person] pon tadop ke*  
*Hmm even [name of a person]*
27. 19/10/2015, 5:21 pm Sarah: U mean sorang2 to give their ic to u now? U mean one by one to give their ic to u now?

28. 19/10/2015, 5:22 pm Zana: [name of a person] xdok gok [name of a person] will not be there

29. 19/10/2015, 5:22 pm Zana: all stdnts kna isi.
   all stdnts need to fill in the form

30. 19/10/2015, 5:22 pm Sarah: Kalu kita bg ke dorng kebarangkalian ilang ke dop borng tu?
   If we give them the form is there any possibility that the form will be lost?

31. 19/10/2015, 5:22 pm Zana: mybe ask rep dia to take it frm me
   mybe ask their rep (representative) to take it frm me

32. 19/10/2015, 5:22 pm Sarah: Okay i ll call [name of a student]. I trust her my whole life... Hamboihhh
   Okay i ll call [name of a student] I trust her my whole life...
   Hamboihhh [interjection]

33. 19/10/2015, 5:23 pm Zana: 👍👍

34. 19/10/2015, 5:23 pm Zana: she wl b responsible 2 return it 2 us

35. 19/10/2015, 5:23 pm Sarah: I ll get the doc from u ya. U r still in ur office eh?
While there is a lot to say about the extract, we are, however, focusing on how a decision is reached in the WA group. In line 17, Zana raises the issue by asking for those who have classes with the TEFL students so that she can distribute a form for the students to fill in. Subsequently, Sarah proposes asking the students to submit the required information to the office’s support staff. This is the first proposal in response to the issue discussed, and her proposal is approved by Zana, through the discourse marker *ok...* (line 19) and suggests an implementation to the proposal. According to Zana, she will leave the relevant document with one of the staff, and she substantiates this with a photo of the document attached in the discussion group (lines 20-22).

The proposal does not last for long as Zana proposes another solution to this issue. Since most of the students will be attending the university’s convocation ceremony, Zana then suggests that a student representative could directly get the document from her. Sarah seeks clarification on this proposal, asking whether the students need to submit the required information individually to Zana (line 27). Zana further re-emphasises her proposal, but she mitigates it with the discourse marker *maybe:* *maybe...* to take it from me. The proposal could be also seen as a (mitigated) directive given to Sarah to pass the document to the student representative. This claim is supported by Sarah’s compliance, when she aptly responds to Zana’s proposal with an exclamation remark of amazement, *Hamboihh* (line 32) and an exaggeration expression I trust her with my whole life, i.e. that she trusts the student representative will keep the document safe.

Following this, Zana responds with a double thumbs up hand sign emoji (line 33), presumably indicating her approval, and thus ratifying the decision. In this excerpt, the emoji is used to convey agreement, acceptance or acknowledgement, especially when it is followed by compliance by a subordinate. The double thumbs up emoji reinforces Zana’s intended message. Evans (2017) mentions that when multimodal support such as an emoji is used to accompany words, it emphasises the idea being expressed.
What makes this episode different from the straightforward category is the implementation of proposals involved in the discussion. Based on the structure of the decision, there are two proposals involved. The first is initiated by Zana when she asks about the student representative getting the document from her, while the second is proposed by Sarah involving distributing the document to the students. As mentioned previously, the implementation of the decision is included in the ‘fairly straightforward’ structure. In this excerpt, the act of decision implementation is seen from lines 35-39 where the responses indicate Sarah’s intention to collect the document from Zana before handing it to the student representative. In the respective lines (lines 35-39), we are informed that the decision reached earlier is final and that the participants are implementing the decision.

The use of emoji has become a fascinating characteristic in DM as they change the way messages are communicated and, depending on the communicative functions of emoji, they simplify the ratification of DM talk. Rather than typing verbatim, an emoji saves time in conveying acceptance and agreement on proposals. As well as representing emotion markers (Darics, 2017; Skovholt et al., 2014), emoji also function as contextualising cues of ratification. Despite this, due to the vague meanings emoji can serve within an interaction, contextual cues and knowledge of context are crucial when interpreting them.

In this context when decisions are not explicitly ratified, the emoji can indicate a form of ratification. The ratification could be strengthened by the actual implementation of the decision by the participants. However, in situations when ratifications or emoji are entirely absent in WA discussions, the actual implementation of the proposal could suggest that a decision has been reached.

4.2 Highly Complex DM Processes
Highly complex DM talk involves several proposals, implementations and reversions. The process demands active participation from the floor with other issues discussed intermittently. What makes this category highly complex is the modification that takes place even after the decision is ratified by those with higher authority. The modification of decisions, on the other hand, is more unilateral, where participants with authority will modify and subsequently have the final say on the decision.

The example of a highly complex DM process from the meeting dataset is divided into three episodes that are labelled a, b, and c. Example 4.2 takes place in a meeting, where the topic of discussion is the search for the right person to inform the schools in Bukit, a district located 100 km away, that the students will no longer be involved in the TP there.
Example 4.2a
Context: This example is taken from Meeting 1, and in this meeting, Eusof is absent. The rest of the participants discuss whether they should give students the freedom to choose their own school for their TP.

1. Sarah:  
>ada dok< (. ) er::: sebab >pengalaman pengalaman dulu ada hok sekolah ni kita anto< <molek sket lah> sebab sebelum //ni\  
>are there< (. ) er::: because >the past experience there were some schools that involved with the TP< <we need to send good students lah> because //previously\  

2. Irene:  
/yes\

3. Sarah:  
ha jadi kalau (. ) kalau //hok\  
ha so if (. ) if //the\  

4. Syahira:  
((looks at Sarah)) /dah\ kalau dia paka dia (. ) dia dia (. ) yang decide?  
((looks at Sarah)) /so\ if they they (. ) they they (. ) decide?  

5. Sarah:  
>dia nak gi sekolah ane gitu? < =  
> they choose which school they want to go? < =  

6. Syahira:  
= bukang::: dia decide::: //grouping dia tu\  
= no::: they decide::: //their groupings\  

7. Zana:  
((looks at Sarah)) /group dia\ ada group dia ada hok hanya jugok ada hok baguh::: //hor\  
((looks at Sarah)) /their groups\ in their groups there are underachieving students and good students::: // so\  

8. Sarah:  
/hoh sudoh \  
/oh no\  

9. Syahira:  
bukan //kita decide takkan kita nak\  
no //we decide we will not\  

10. Irene:  
/sekarang \ni dia\ dia decide group dia decide schools kan? sekarang ni=  

/so now they will decide their group they will decide schools right?

11. Zana: 
((looks at Irene)) = > dok school kita decide for them 
((somebody enters the room)) tapi once kita pilih group dia (.) makna > tiga tiga orang akan g sekolah sama lah =
((looks at Irene)) = > no the schools we will decide for them 
((somebody enters the room)) but once they choose their own group (. . .) it means that > all of them < will go to the same school lah =

12. Irene:
= maksudnya kalau jenis nak duduk rumoh? > takleh sama je la dok? < (. . .) kita::: maksud kita er::: ((refers to her note)) kita < decide > > dia decide group < kita decide sekolah =
= what about those who wants to stay at their home? > the same rule applies right? < (. . .) we::: that means we er::: ((refers to her note)) we < decide > > they decide group < we decide the schools =

13. Syahira:
= OK gini (. . .) why not (. . .) ((looks at Zana)) kita bubuh list of school:::=
= OK like this (. . .) why not (. . .)((looks at Zana)) we distribute the list of schools::: =

14. Irene: =a ah ((indicates agreement))

15. Syahira: ↑ dia::: > bagi kita (. . .) //group dia < dengan::: // school 
sekoloh dia nak gi =
↑ they::: > give us (. . .) // their group < with::: // schools \ the schools that they want to go to =

16. Zana:
/ revise \ / (xxx dia pilih mana dia nak gi) /
/ revise \ / (xxx) they choose the schools that they want to go \ /

17. Irene: = a ah (nods) (. . .) < dekat area dia dah > ke::: =
a a h ((nods)) (. . .) < they may choose schools that are near to their> house:::

18. Sarah: mhm mhm mhm =

19. Irene: = gitu = something like that
20. Sarah: *boleh gok >first come first serve ah< =
that should be fine >first come first serve ah< =

21. Syahira: = ha //first come first \

22. Irene: /mhm\\

23. Sarah: /mhm mhm\\

24. Irene: =eh ? >wat gitu eh ?<
= eh? (.) we do something like that eh? ((jots down))

25. Sarah: ((first come first serve basis)) ((jots down)) (. ) first time ever
ni ((laughs))
((first come first serve basis)) ((jots down)) (. ) this is first time
ever ((laughs))

EIGHT TURNS ARE OMITTED WHERE THE PARTICIPANTS REINFORCE THE DECISION

31. Sarah: OK so habis bahagian grouping
OK so that's the grouping sorted out

Prior to coming to this topic, Sarah mentions to the team that they need to be vigilant in allocating groups of students to some schools participating in TP. This is due to disciplinary problems among students caused by the previous students, which has tarnished the university’s reputation. This topic leads Syahira to propose to the team that students should be allowed to choose their own schools for the TP placement (line 4).

Zana reformulates Syahira’s proposal and states that the students will be given freedom to form their own groups but the team will have the final say in allocating the school placement for them. In line 13, with the discourse marker *OK*, Syahira departs from the current topic and initiates an implementation for her proposal earlier, suggesting that they could distribute the list of schools to the students for them to choose with ease. Lines 17-21 observe the participants agreeing to Syahira’s proposal and eventually lead Sarah and Irene to make a record of the decision by taking notes (line 25).

It is noteworthy to draw attention to Irene’s and Sarah’s act of jotting down the decision as indicated in line 24. As mentioned before, Irene is in charge of all the matters pertaining to TP, hence it is not surprising to see her recording the decision. However, in identifying the act of jotting down a decision as an indication of ratification, it is crucial for analysts to refer to
the position held by the person. As put forth by Clifton (2012), in order for a proposal to be considered as a decision, the decision should be ratified by those with legitimate power. In this case, the ratification of jotting down the decision is referred to as Sarah’s act, who is not only the chair but also the formal leader of the team. Also, the act of summarising the discussion by Sarah indicates her authority by marking that a decision has been made and that the topic has come to an end. (line 31).

This example presents an ‘issue-solution-decision progression’ (Marra, 2003, p. 111), indicated by the proposal (line 4), proposal of implementation (line 13) and the ratifications of the decision (lines 25 and 31). Nonetheless, the decision reached in the meeting is revisited a month later, which categorises this instance as a highly complex DM process. Example 2b presents the alteration process of the decision that takes place in the WA group.

Example 4.2b
Context: A month after the last conversation, Sarah brings the topic of the students’ schools placement to the WA group. She updates the team on the discussion that she had with the students in respect of the issue. The WA platform is seen prominently as a mediated communication tool between the decisions made in meetings.

289)24/11/2015, 9:45 pm - Sarah: Guys, i had a long chat wth students
290)24/11/2015, 9:46 pm- Sarah: Utk kebaikan bersama, kita pilih sekolah utk diorang. Grouping dorang buay
   For the common good, we will choose school for them. They will d the groupings
291)24/11/2015, 9:46 pm- Sarah: Buat
   Do [makes repair to the wrong spelling in previous post]
292)24/11/2015, 10:07 pm - Eusof: Ok
293)24/11/2015, 10:07 pm - Eusof: Tapi ada yg request nak sekolah yg jd mutet centre tu mcm mana
But what about those who request to be placed at schools that were registered as MUET test centre?

294)24/11/2015, 10:08 pm - Eusof: [name of student] nak school a sbb nak dop umah family dia

[name of student] wants school A because it is near to his family’s home

295)24/11/2015, 10:09 pm - Sarah: Most importantly dorang kena buat group dorang dulu. Pastu kita decide school. Kalau ada reques tu kita tgk by cases lah kan

Most importantly they need to form their groups. Then we will decide the schools. If there is such request, we will look by cases lah right

296)24/11/2015, 10:09 pm - Sarah: Sebab masa discuss dalam group whatsapp tadi diorang yg undi. Justifikasi diorang, kalu diorang pilih, confirm bergaduh

Because they have voted when we had discussion in the whatsapp group just now. Their justification, if they choose, it will cause conflict among them.

297)24/11/2015, 10:09 pm - Sarah: Heehhe

298)24/11/2015, 10:14 pm - Eusof: Ok

299)25/11/2015, 8:42 am - Irene: Betol2..irene stuju sbb bila duk ckp2,ada yg ckp x adil kalo dtg awl tp x sempat pilih sbb x sempat tulis dulu

Yes2. I agree because when I talked to them, some of them said it will be unfair if some of them turn up early
but do not have the chance to write [on the list] first

300)25/11/2015, 10:03 am - Sarah: *Irene & eusof, kaksarah nak jumpa students lepas ni. Irene & eusof ada skali x?* Irene & eusof, I want to meet the students afterwards. Are you both going to be there?

In line 289, at 9.45 p.m., Sarah updates the team with the decision that she has made after having a substantial discussion with the TEFL students. According to her, the students prefer to be allocated by the staff rather than choosing the schools themselves. In the previous meeting (Example 4.2a), the team had decided to give freedom to the students to choose the schools they preferred. On a macro view of this situation, the time in which the discussion is initiated illustrates the workplace norms imposed by the communication tool used by the team.

Fifteen minutes later, replying with an unelaborated response, *OK* (line 293, Eusof raises a new issue. He expresses his concern about the students who made a request to be allocated to schools where they were registered for the test centre for the Malaysian University English Test (MUET). He also mentions another issue; the demands made by students to be placed in schools that are closer to their home (line 294). These concerns have been addressed in M1 but because he was absent, it is understandable that Eusof raises such concerns to seek clarification. After responding to Eusof, Sarah briefly explains the reasons behind the decision. She explains that the students preferred to be allocated, instead of choosing the schools themselves (line 296).

The next day, Irene responds to the conversation and expands on Sarah’s contribution to the students’ schools placement (line 299). Her turn does not seem to invite any responses from others. Two hours later, Sarah launches a new topic and asks Eusof and Irene whether they would want to join her for a short meet up with the TEFL students. In the subsequent turns, the issue is not picked up again and hence, gives an indication that the decision has been updated. The topic shift by Sarah (line 300) shows that the topic is closed for further negotiation.

This instance shows that a decision made and ratified in the meeting has been updated a month later, after a discussion in another interactional context. Although it was decided
collectively in the meeting, the decision can be altered at another time. Using her legitimate authority, Sarah announces the decision that she has arrived at after a discussion with the students, and without consulting other participants. In this case, it is fair to conclude that highly complex decisions could initially be made collectively and unilaterally decided upon by those with authority (see also Schnurr, 2009). In comparison to Marra (2003), who found that complex decisions involve resistance over the dominance of more powerful members, both Examples 4.2a and 4.2b demonstrate that the authority figure dominates in the modifying decisions without any (explicit) contention from others. The analysis of two interactional contexts provides empirical evidence of the lengthy progression and intertextuality of DM processes between meetings and WA platform.

4.3 Discussions

One of the main findings worth pointing out is that the categories of DM processes aptly capture the ideas of previous scholars, namely that decisions are ephemeral, ‘potentially short-lived and burdened with great uncertainty’ (Halvorsen & Sarangi, 2015, p. 11) yet emerging and ubiquitous, and, ‘should be placed in the context of a continuous stream…in a variety of settings’ (Huisman, 2001, p. 76). The decisions are contingent upon work plans and situations, hence they are constantly open for further modifications and scrutiny – sometimes even across interactional contexts (Halvorsen & Sarangi, 2015). Therefore, the findings discussed here support the claim that ‘the ‘rationale’ of a decision made in interaction is a socially situated construct of the interaction’ (Huisman, 2001, p. 71). From the findings, we can draw connections between the role of WA and DM. In this research, we have observed the intertextuality between the WA messages and face-to-face meetings with regards to the DM processes. The continuous processes of DM and changes of decisions occurred from one context to another show that decisions are continuously faced with adjustments of tasks and situations.

Apart from that, we also can conclude that the use of WA group is reflective of its main purposes: to make quick decisions, give confirmation or approval, and provide information regarding the issues raised. In the WA discussion, the participants were able to communicate despite not being in the same physical location. In fact, the participants were separated by time and/or space and yet were able to act upon the proposals when needed. WA allows analysts to observe decisions being implemented and that the implementation acts for keeping abreast of the latest update of the decisions. This is a realisation that does not often occur in the face-to-face meetings.
Another instance that shows WA is widely used among the participants for work purposes include the use of WA in the immediate meeting. This situation can be seen in Meeting 4, where Sarah, who was present in the meeting, contacted Syahira, who was absent, through WA to gain important information. Throughout the communication process, all members had access to the messages and so witnessed and benefited from the responses supplied by Syahira. Also known as ‘multitask[ing] or multi-communicat[ing]’ (Darics, 2016, p. 69), these instances show that communication technologies enabled the participants to undertake several conversations concurrently, without the topics necessarily connecting to each other. The examples also strengthen the claims made by Sarah, Syahira and Irene during the interviews that the WA group was used prevalently when immediate feedback and actions were required.

The fluid nature of decisions has important implications for research on DM as it addresses the crucial question: Where does a DM episode officially end? In responding to this enquiry, examinations of several significant contexts are essential to trace the emergence or alteration of decisions. The members of the team claimed that meetings and WA were used most prominently in comparison with other modes of communication. Sometimes WA was used in the meetings, which was generally considered to be socially acceptable. We were lucky enough to be given access to two main, different contexts of DM in this team. Although in some places, DM processes may not be limited to other contexts such as emails, phone calls, or one-to-one interaction only, the data are capable of capturing the incremental progression of decisions in different settings – which is underrepresented in DM research, despite being incredibly relevant.

4.4 Implications of The Use of WA in The Workplace

One of the most obvious features that differentiated between face-to-face meetings and WA is their synchronous and asynchronous nature, respectively. Assuming that emails and IM are the closest genre of communication to the contemporary WA app, several researchers have discovered that virtual communication reduces social barriers and eases communication for everyone, regardless of their hierarchical levels (Kiesler, Siegel, & McGuire, 1984; Dubrovsky, Kiesler, & Sethna, 1991; Allen, 1995). Dubrovsky et al. (1991) notice increased participation and ‘assertiveness’ among inexpert members and a significant decline in the influence of high-status members. They assert that communication technologies ‘attenuate the social-contextual cues available in face-to-face conversation’ (Dubrovsky et al., 1991, p. 123) and use the term ‘equali[s]ation phenomenon’ (p. 136) to refer to the grey areas of status and expertise in virtual
communication. Bouhnik and Deshen (2014, p. 228) investigate the use of WA in schools and claim that the WA app has ‘crossed the dividing lines between the teachers and the students’. Similarly, Darics (2017) finds that IM is effective for the negotiation of power differences. Kiesler et al. (1984, p. 1125) ascertain that the absence of non-verbal behaviour in computer communication might ‘weaken social influence’.

Aligned with the previously mentioned research, this study agrees that WA app is relatively a more comfortable context for everybody to assert influence, dominance, and even do leadership. This is because the WA app provides flexibility and accessibility for all members to initiate conversation, possibly without the fear of judgement or other environmental factors that might affect their behaviour, like in a face-to-face setting. The WA platform is less restricted by authority and turn allocation, and thus offers opportunities for members to step up for work responsibilities, and even leadership at any point.

Despite the generally positive usage of the WA platform, it is also worth reiterating how WA can negatively impact workplace practices and create an unhealthy work-life balance. Although none of the participants expressed discomfort when receiving WA messages outside the core working hours, one of the participants explained that the use of WA meant that the team took things for granted. For instance, there were several occasions where the meetings were held ad hoc, and only announced through WA. Such acts were deemed intrusive and discourteous because participants were not informed in advance and decisions were not previously agreed by all members. The members might find themselves excluded and overloaded with demanding work tasks. The fact that the WA platform added another communication tool for the participants to constantly check and respond to could be overwhelming to some, thus further blurring the lines between personal and professional life.

The findings from the WA interactions could be presented to the participants to reflect on several aspects such as the time the messages were sent, the nature of the issues and decisions that were commonly discussed and achieved on WA, the average duration of the discussions, and the participation received. These aspects would invite the participants to reflect on their DM practices and consider whether WA could have detrimental effects on work-related stress. It is hoped that the dissemination of these findings and a discussion on these concerns would invite critical reflection and awareness on the cumulative effect of increased working hours, mental well-being and healthy work-life balance.
5.0 CONCLUSION
This study addressed the call by Darics (2017) for the investigation of workplace interactions on text-mediated communication on social media sites and messaging apps.

By sampling data and studying DM from different contexts of communication, we have verified the popular claim that decisions are ephemeral (Darics, 2017), ‘continuously faced with changes and adjustments of tasks and plans’ (Halvorsen & Sarangi, 2015, p. 11) and that ‘the future is inherently uncertain and that decision-making is a fundamentally contingent activity’ (Halvorsen & Sarangi, 2015, p. 11). With the prevalent use of WA by the investigated team, we can conclude that the platform has been a remarkable setting for the team to further their workplace objectives, crossing the boundaries of conventional ways of workplace ethics and working hours. The use of WA may be potentially regarded as widely socially acceptable in most workplaces today. Its role in the evolution in digital interaction platforms has redefined the modern ways in accomplishing workplace objectives such as DM, getting responses and confirmations in a quicker way. Despite that, the use of this technology may also bring challenges in workplace setting, hence it is pertinent for all organisations to develop standards and perhaps, policy to be communicated to all staff as a preventative way to tackle the potential risks that posed by WA.

REFERENCES
Abdullah, M., Mohd Tahir, L., & Mohd Said, M. (2014). Leadership assignation for knowledge sharing amongst Mara technical colleges directors. Paper presented at 2014 International conference of teaching, assessment and learning (TALE) (pp. 159-165). New Jersey: Institute of Electrical and Electronics Engineers.

Allen, B. (1995). Gender and computer-mediated communication. Sex Roles, 32(7-8), 557-563.

Angouri, J., & Marra, M. (2010). Corporate meetings as genre: A study of the role of the chair in corporate meeting talk. Text and Talk, 30(6), 615-636.

Bouhnik, D., & Deshen, M. (2014). Whatsapp goes to school: Mobile instant messaging between teachers and students. Journal of Information Technology Education: Research, 13(1), 217-231.

Cameron, D. (2001). Working with spoken discourse. London: SAGE Publications Ltd.

Church, K., & Oliveira, R. (2013). What’s up with WhatsApp? Comparing mobile instant messaging behaviours with traditional SMS. Collaboration and Communication Conference Proceedings of the 15th International Conference on Human-Computer
Interaction with Mobile Devices and Services, August 30th, Munich, Germany (pp. 352-361). Munich, Germany: Association for Computing Machinery.

Clifton, J. (2012). A discursive approach to leadership: Doing assessments and managing organisational meanings. Journal of Business Communication, 49(2), 148-168.

Clifton, J. (2017). Taking the (heroic) leader out of leadership: The in situ practice of distributed leadership in decision-making talk. In Ilie, C. & Schnurr, S. (Eds.), Challenging leadership stereotypes through discourse (pp. 45-68). Singapore: Springer.

Daud, N. (2014). Technology in managing an academic institution with a focus on language faculty. Middle-East Journal of Scientific Research, 20(20), 136-142.

Darics, E. (2016). Writing online a guide to effective digital communication at work. United States of America: Business Expert Press.

Darics, E. (2017). E-leadership or ‘how to be boss in instant messaging?’ the role of nonverbal communication. International Journal of Business Communication, 57(1), 3–29.

Dubrovsky, V., Kiesler, S., & Sethna, B. (1991). The equalization phenomenon: Status effects in computer-mediated and face-to-face decision-making groups. Human Computer Interaction, 6(2), 119-146.

Duranti, A. (1997). Linguistic anthropology. Cambridge: Cambridge University Press.

Halvorsen, K., & Sarangi, S. (2015). Team decision-making in workplace meetings: The interplay of activity roles and discourse roles. Journal of Pragmatics, 76(1), 1-14.

Evans, V. (2017). The emoji code. London, UK: Michael O’mara Books Limited.

Haque, M., Ahlan, A., & Mohamed Razi, M. (2015). Factors affecting knowledge sharing on innovation in the higher education institutions (HEIs). Journal of Engineering and Applied Sciences, 10(23), 18200-18210.

Herring, S., & Androutsopoulos, J. (2015). Computer-mediated discourse 2.0. In Tannen, D., Hamilton, H. & Schiffrin, D. (Eds.), The handbook of discourse analysis, 2nd ed. (pp. 127-151). West Sussex: John Wiley & Sons.

Holmes, J., Marra, M., & Vine, B. (2011). Leadership, discourse and ethnicity. Oxford: Oxford University Press.

Huisman, M. (2001). Decision-making in meetings as talk-in-interaction. International Studies of Management & Organization, 31(3), 69-90.

Janis, I., & Mann, L. (1977). Decision making: A psychological analysis of conflict, choice, and commitment. New York: Free Press.
Johnston, M. J., King, D., Arora, S., Behar, N., Athanasiou, T., Sevdalis, N., & Darzi, A. (2014). Smartphones let surgeons know WhatsApp: An analysis of communication in emergency surgical teams. *The American Journal of Surgery, 209*(1), 45-51.

Marra, M. (2003). *Decisions in New Zealand business meetings: A sociolinguistic analysis of power at work.* (Unpublished PhD thesis). Victoria University of Wellington, New Zealand.

Mullany, L. (2007). *Gendered discourse in the professional workplace.* Basingstoke: Palgrave Macmillan.

Kiesler, S., Siegel, J., & McGuire, T. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist, 39*(10), 1123-1134.

Petruzzi, M., & De Benedittis, M. (2016). WhatsApp: A telemedicine platform for facilitating remote oral medicine consultation and improving clinical examinations. *Oral Medicine, 121*(3), 248-254.

Saferstein, B., & Sarangi, S. (2010). Mediating modes of representation in understanding Science: The case of genetic inheritance. In Prior P.A., Hengst J.A. (Eds), *Exploring semiotic remediation as discourse practice* (pp. 156-183). London: Palgrave Macmillan.

Schnurr, S. (2009). *Leadership discourse at work: Interactions of humour, gender and workplace culture.* London: Palgrave Macmillan.

Sutling, K., Mansor, Z., Widyarto, S., Lechmunan, S., & Arshad, N. H. (2015). Social media: How it ensures effective communication among project teams. *International Conference on Applied Computer and Applied Computational Science (ACACOS’15), Kuala Lumpur, Malaysia, April 23-25* (pp. 222-227). Kuala Lumpur: WSEAS Press.

Sánchez-Moya, A., & Cruz-Moya, O. (2015). ‘Hey there! I am using WhatsApp’: A preliminary study of recurrent discursive realisations in a corpus of WhatsApp statuses. *Procedia – Social & Behavioral Sciences, 12*(2), 52-60.

Skovholt, K., Grønning, A., & Kankaanranta, A. (2014). The communicative functions of emoticons in workplace emails: :-). *Journal of Computer-Mediated Communication, 19*(4), 780-797.

Svennevig, J. (2008). Exploring leadership conversations. *Management Communication Quarterly, 21*(4), 529-536.

Svennevig, J. (2011). Leadership style in managers’ feedback in meetings. In Angouri, J. & Marra, M. (Eds.), *Constructing identities at work* (pp. 17-39). Basingstoke: Palgrave Macmillan.
Wodak, R., Kwon, K., & Clarke, I. (2011). Getting people on board: Discursive leadership for consensus building in team meetings. *Discourse & Society, 22*(5), 592-644.

Zimmerman, P., Wit, A., & Gill, R. (2008). The relative importance of leadership behaviours in virtual and face-to-face communication settings. *Leadership, 4*(3), 321-337.
APPENDICES

Data was transcribed using a combination basic conversation analysis (Jefferson, 1987) (http://ca-tutorials.lboro.ac.uk/notation.htm) and LWP transcription conventions (http://www.victoria.ac.nz/lals/lwp/).

word= No discernible pause between two speakers turn
= word
( .) Pause
( xxx) Unable to transcribe
( ( ) ) Other paralinguistic details
>word< Faster speech
<word> Slower speech
word Sounds are louder
↑word Rise pitch
↓word Fall pitch
wo:::rd Sounds stretching

(Jefferson, 1978)

…//...
Simultaneous speech (overlaps)

[.../...
Other information

(LWP transcription conventions)