

Email Adaptation for Conflict Handling: A Case Study of Cross-border Inter-organisational Partnership in East Asia

Joyce Y.Lee, Niki Panteli, Carol Hsu, Anne-Marie Bulow

Abstract

This paper explores the context of email-based communication in an established but fragile, inter-organisational partnership which was often overlain with conflict. Drawing upon adaptation theory, this study explores how participants adapt to the use of email to handle conflict. Extensive data were obtained during a six-month field study of a case of cross-border inter-organisational collaboration in East Asia. We observed that the individuals involved in the cross-border partnership utilised email as a lean form of communication to stop covert conflict from explicitly emerging. In contrast to prior research on the leanness of email in managing conflict, we found that under the described conflict situation the very leanness of email was appreciated and thus, exploited by those concerned to manage the conflict situation. Specifically, we identified four key conflict-triggered adaptation strategies, namely, interaction avoidance, disempowering, blame-protection and image-sheltering that drove the ways in which email was adapted to maintain organisational partnerships under conflict.

Keywords: email, adaptation theory, conflict, virtual team, inter-organisational partnerships

Introduction

Conflict occurs regularly in the international business setting (e.g. Weingart et al., 2015) and the participants' disparate cultures, languages or organisation goals can exacerbate the situation (Bjorn & Ngwenyama, 2009; Hinds & Mortensen, 2005; Ravishankar, 2015; Wakefield et al., 2008; Watson-Mnheim et al., 2011). Whilst conflict is not necessarily dysfunctional to organisations (e.g. Jehn & Mannix, 2001), its management can expend much time and energy, and organisations can become embroiled in conflict escalation (e.g. Rubin et al., 1994). Previous research has focused on its causes (e.g. Boulding, 1963; Pondy, 1967), development (e.g. Rahim, 2001; Thomas, 1976), and possible resolution (e.g. Jehn, 1997; Rubin et al., 1994; Wall & Callister, 1995). Whilst there is a substantial amount of literature in this domain, we still have limited understanding regarding conflict management for today's business setting, in

which participants rely heavily on information communication technologies (ICTs) for their interactions, as they are often geographically dispersed.

Prior studies have reported that ICTs are inadequate for managing conflict and rebuilding trust (Hsatings & Payne, 2013; Johnson & Cooper, 2009; Maruping & Agarwal, 2004; Turnage, 2008). In particular, email, being a lean form of communication (e.g. Daft & Lengel, 1986), can increase the likelihood of conflict escalation (Friedman & Currall, 2003; Lee & Panteli, 2010) and hence, lead to relationship breakdowns (Bjorn & Ngwenyama, 2009). However, despite its limitations, email remains the most popular medium of communication in the workplace (Byron, 2008; Jung & Lyytinen, 2014; Lee & Panteli, 2010). As email is an ICT extensively used for day-to-day communication, it seems inevitable that conflict issues need to be dealt with through this medium. This is an important and possibly unavoidable challenge for most cross-border inter-organisational partnerships that use email for communication. During our case study, we observed that email was heavily used for inter-organisational communication as well as when managing conflict between the involved companies. This example provided us with rich data regarding how such conflict is managed so as to ensure project survival. Whilst prior research has suggested that adaptations in technology use can lead to the communicators in a virtual environment performing their work more successfully (Majchrzak et al., 2000; Thomas & Bostrom, 2010b), we found that how it is used and adapted specifically to manage conflict to maintain inter-organisational relationships remains an under-explored question. In this study, we draw on adaptation theory as the theoretical lens (Thomas & Bostrom, 2010b) and address the question:

How is email adapted in conflict situations so as to sustain communication and partnerships in an inter-organisational context?

We report the results from a case study of an inter-organisational partnership of companies based in East Asia, but in different countries within the region. Specifically, the partnership involved the R&D department of a technology company, EAclient (a pseudonym), and its chief supplier/co-developer, EAsupplier (a pseudonym), for eight particular projects. The East Asia region, which the case stems from, is characterised by a culture that is known for its caring relationship-oriented values (e.g. Gao et al., 2010; Leung et al., 2002) and a desire to maintain harmony (e.g. Tjosvold & Sun, 2002; Wang et al., 2012). Hence, maintaining good relationships becomes a crucial business issue. In our case, we found that whilst the EAclient-EAsupplier partnership was often overlain with conflict, their relationship continued as the

result of email adaptations adopted by the participants involved. Even though the participants did not resolve the conflict, they were able to appropriate different email features in a way that enabled them to continue the business relationship. We posit that our findings extend theory on technology adaptation by uncovering that conflict can be a specific trigger for technology adaptation. Moreover, having focused on East Asia, we have elicited the particularities of the email behaviour between business collaborators in this particular cultural context.

The remainder of the paper is organised as follows. The next section reviews and discusses the relevant literature regarding conflict in an email dominated communication setting, where the partners involved are geographically dispersed. It is followed by a discussion of technology adaptation theory as the dominant theoretical lens to understand the use of email in conflict situations. We then introduce our research methodology and continue with the narrative of our case study. The final section concludes the paper with theoretical and practical implications and suggests avenues for future research.

Literature Review: Email Use, Inter-organisational Communication and Conflict

The role of ICT in facilitating inter-organisational activities has been heatedly discussed within multiple disciplines, as evidenced by the emergence of theories that centre on ICT's choices and selection (e.g. Kock, 2009; Massey & Montoya-Weiss, 2006) and its use and effect (e.g. Leidner, 2010; Neeley, 2015). In this domain, there are, however, mixed research findings regarding the use of email for organisational communication. Given its lean form of communication, some studies have shown that it is inadequate for any kind of organisational relationships that involve persuasion, negotiation, and decision making, thus negatively impacting on communication outcomes (Byron, 2008; Dennis et al., 2008; Friedman & Currall, 2003; Maruping & Agarwal, 2004). Other studies have demonstrated that despite its inherent limitations, email remains the most common medium in work settings for day-to-day organisational communication (Byron, 2008; Jung & Lyytinen, 2014). As email is quintessential to inter-organisational activities, it is of paramount importance that when studying its usage, the issue of conflict management should be addressed.

From the viewpoint of inter-organisational communication, researchers argue that the dominant reason for the universal use of email is its efficiency (Louhiala-Salminen & Kankaanranta, 2005). Furthermore, email allows users to keep a record of their exchanges, a quality highly prized in business (Jung & Lyytinen, 2014), and to pace the interaction, i.e. to formulate a text

and revise it before pressing *send* when finished, termed recordability (Jung & Lyytinen, 2014; Lee & Panteli, 2010) as well as permitting reviewability and revisability (Dennis et al., 2008; Friedman & Currall, 2003). In particular, studies have shown that for non-native English language users, email is often the preferred choice (Durham, 2007; Klitmøller & Lauring, 2013; Lee & Panteli, 2010; Skovholt & Svennevig, 2006), for several reasons. First, telephone conversations require immediacy in terms of access to vocabulary and syntax, as well as high levels of comprehension, which many non-native speakers do not possess. Email writing can be produced at any pace set by the writers, it gives non-native communicators time to ponder on the words and sentences (Crystal, 2007; Waldvogel, 2007) and helps communicators to create more polite speech than with face-to-face (FTF) or other communication media, such as the telephone or audio-conferencing (Duthler, 2006). Second, with the generally accepted informality of this medium, mistakes are not scored against a sender's credibility, as they could well be in a more formal letter (Jensen, 2009). Finally, some researchers have shown (Sheer, 2012; Sheer & Chen, 2004) that the individual relationship is a factor that can induce a manager to choose email over FTF communication. For instance, if the message is negative, the psychological distance of email usage can help ease the burden of embarrassment and the threat to that person's self-image.

From the perspective of conflict management, prior research has demonstrated less favourable results in relation to the use of email in resolving conflict so as to maintain business relationships (Bjorn & Ngwenyama, 2009; Byron, 2008; Friedman & Currall, 2003; Maruping & Agarwal, 2004; Turnage, 2007). Friedman & Currall (2003) explain that the turn-taking system in a *dialogue* can be abused, with a tendency to bundle large amounts of information so that the receiver might only pay attention to a fraction of the sender's answer. The dialogue can lead to false assumptions when there are ambiguities in the message or it can be subject to over-interpretation (Economidou-Kogetsidis, 2011; Klitmøller & Lauring, 2013). Another concern is the presence of ambiguities in email communication when more than two people participate in the exchange. While email copies serve to share knowledge of ongoing projects and can be useful for developing engaging multi-party interaction (Skovholt & Svennevig, 2006), copying to a third party can also be adopted for reasons of control among distributed work groups, e.g. by putting pressure on the addressee to conform (Skovholt & Svennevig, 2006), by increasing centralised power or by facilitating the building of coalitions (Panteli, 2002). Email exchanges can contribute to conflict due to missing contextual information, an unperceived difference in

the salience of information and contrasting interpretations of silence (Cramton, 2001; Panteli, 2004). Moreover, different norms regarding the expected speed of answering can also be the cause of conflict. For instance, Klitmøller & Lauring (2013) report the different sensitivity to time and urgency European and Indian colleagues displayed in answering emails, very often the latter on the receiving end failed to understand the urgency set by the former.

From the above discussion, it can be seen that email offers ease and efficiency and apparently a commonly accepted means of communication in inter-organisational interactions. However, it is generally considered as being inadequate for managing conflict and mending broken relationships. This raises the following questions: within the inter-organisational context, can email be adapted to manage conflict? If this is possible, to what extent can it be adapted, for what purposes and how exactly will that adaptation work? These are important questions that have remained under explored. To address these research questions, we draw on the theory of adaptation to elicit how email is used for managing inter-organisational conflict.

Theoretical Foundations: Adaptation Practices in IS research

Within the area of IS, adaptation has been recognised as important in changing uncertain and complex organisational settings (Rosen et al., 2011). The research streams in this field can be categorised as the types of adaptation, adaptation strategies and the triggers for adaptation. Adaptation, as reaction and unscripted activity (LePine, 2003), has been linked to several relevant principles, such as technology, task and user behaviour (Kashefi et al., 2015). While technology adaptation refers to how people modify information technology or its features (Thomas & Bostrom, 2008; Thomas & Bostrom, 2010a), task adaptation (Barki et al., 2007) pertains to tasks being modified as a result of technology in use. Moreover, behaviour adaptation refers to how people adapt their behaviour so as to take advantage of the technological features (Sun, 2012). In this vein, Beaudry and Pinsonneault (2005), putting the focus on the user's behaviour change to cope with IT events in the work environment, have identified behaviour adaptation involving technology appropriation, avoidance and resistance. Similarly, Kock (1998; 2001) has suggested that while ICTs can present obstacles to communication, especially for organisation members conducting complex tasks, people may change their communication behaviour in order to compensate for those obstacles caused by the chosen technology. Moreover, collective adaptation practices have been discovered by researchers in the areas of IT adoption, task-technology fit and IT appropriation. Within this body of literature, it is generally agreed that while users' initial appropriation of an ICT can be

an important first step towards its successful use, it is the ongoing adaptation during work that results in the eventual success or failure of any given technology or system (Kock, 2001; Majchrzak et al., 2000; Poole & DeSanctis, 1990; Thomas & Bostrom, 2008). Such adaptation practices have been found to be important for improving, not only individuals' work but also the organisation's business processes (Barki et al., 2007). Moreover, Schmidt et al. (2010) explain that adaptation could have an integrative dimension when the technology at hand is used to *do things better* or to *stop doing things*. Also, adaptation may have an emergent dimension when users appropriate technology in a way that allows them to *do new things*.

In addition to the types of adaptation discussed above, the importance of adaptation strategies for organisational outcomes has been recognised. In this vein, Thomas and Bostrom (2010a) point to the role of project leaders and identify five strategies that can be applied during technology adaptation to encourage team members to use a new ICT or an existing one with new features to enable new interaction behaviours. The strategies are: a *switching* strategy, which involves a leader acting to switch his or her team from an existing technology to a new one due to its enhanced features and reliability; an *expanding* strategy, whereby a leader acts to expand team usage of an existing technology into an additional work context; a *merging* strategy, referring to the situation when a leader tries to get his or her members to merge their incompatible tools into a single technology; a *modification* strategy, pertaining to where a leader tries to introduce new features to an existing technology; and finally, a *creation* strategy, whereby a leader introduces a new technology with new features. Some research has shown that immediately after the introduction of a new technology the chances for adaptation are greater than at later stages, as there are more opportunities for experimentation with the new technology (Tyre & Orlikowski, 1994). Other researchers, drawing on adaptive structuration theory, have posited that a change of activities or unpredicted events may contribute to a change in the use of ICTs (DeSanctis & Poole, 1994). It is argued that through successful strategies of technology adaptation, communicators can build trust and organisation effectiveness can be improved (Thomas & Bostrom, 2008).

It follows that the majority of the literature has given emphasis to the importance of adaptation regarding IT, in particular, the nature of the adaptation and the strategies that support it. Thomas and Bostrom (2010b) posit that adaptation management serves as a necessary means to gaining the necessary control. By using the input, process, output model, they have extended theory in this area by showing numerous triggers that can contribute to technology adaptation. Additional

triggers found to exert an influence on this process include external pressures, internal team characteristics, such as size, ICT inadequacies and trust as well as relationship inadequacies, including low trust and conflict situations (Thomas & Bostrom, 2010b). Moreover, Sun (2012) has introduced a model of adaptive system use showing that individuals may change which features are used, according to the different triggers and hence, they perform different behaviours.

Whilst in the prior studies, deliberate initiatives have less of an influence on adaptive system use, novel situations and discrepancies have been found to be significant antecedents of adaptation. The current study extends the theory on adaptation through a longitudinal study of cross-border inter-organisational collaboration, where the trigger for adaptation was the conflict experienced between the inter-organisational members and the technology in place was a well-established communication medium, that of email. The longitudinal nature of the study has allowed us to investigate, not just the existence of the trigger to justify intervention in the strategy of adaptation, but also to explore, in detail, the strategy of adaptation and the resulting outcomes.

Research Methods

Recognising that technology adaptation processes can be subtle (DeSanctis & Poole, 1994) and that participants might not be able to specify or explain them, the method of the interpretive case study (Pan & Tan, 2011; Walsham, 1995) is considered appropriate for this research as this approach is well-documented for investigating implied meanings embedded within natural settings (Davidson & Chismar, 2007; Hsu et al., 2014; Pan & Tan, 2011). As aforementioned, the empirical setting of this study involved two companies, EAclient and EAsupplier, across two different countries in East Asia. The personnel spoke different native languages and thus, English was the lingua franca for their inter-organisational communication (though no formal agreement was signed on this aspect of their working relationship). The inter-organisational relationship was initially built on buyer and supplier terms. Later, they developed a strategic partnership for the joint development of a component called DP. However, the strategic partnership did not go smoothly, for we observed that mutual mistrust and conflict appeared frequently throughout the duration of the case study. In the circumstances, we found that the inter-organisational communication largely relied on email. Despite the literature having overwhelmingly disapproved the use of email to manage conflict, the participants in our case opted to do so throughout and the collaborative projects were

eventually completed. This case offered a great opportunity for us to probe the question about why and how email can be employed for communication in conflict situations.

For the field study, one of the researchers worked at EAclient's headquarters as a temporary engineer in the R&D department for six months. She participated in both formal and informal social activities, including meetings, telephone discussions, audio- and video-conferencing meetings, email communications, product seminars and informal social events. She recorded what she observed as salient to the research focus as it occurred and then completed a log at the end of every workday (see Appendix A for an example) to shed light on the contextual conditions for email use throughout the EAclient and EAsupplier communication process.

During the period of the study, interviews were held on a casual basis, in situations where observations came up that sparked questions on the part of the researcher. Recognising that the organisational relationship between the two firms was sensitive to the participants involved and that they resisted talking about it in formal interviews, the informal conversational interviews and observations provided more flexibility, which increased the opportunities for the researcher to collect data. The interviews were conducted on a daily basis during the six months of the field study and 18 participants, including the managers and engineers from the two firms, were the key informants. In addition to the logs and transcribed interviews, the documentation included email exchanges, meeting minutes, formal working documents (e.g. product specification sheets and evaluation reports), informal operations reports (e.g. failure analysis) and other relevant written sources that contributed to the researchers gaining a comprehensive understanding of the case. The three information sources (i.e. observation logs, interviews and documentation) constitute data triangulation (Patton, 2001), an approach through which multiple sources of evidence are collected in order to minimise the degree of distortion as well as to reduce the risk of arriving at misleading conclusions brought about by biases in the data.

Regarding the analysis of the data, technology adaptation theory was used to guide the process and structure the narrative of the case, thus resulting in a dialogical process operating between the data and the theory (Gregor, 2006; Klein & Myers, 1999). In this case study, based on the theoretical foundations of adaptation, the gathered data lent themselves to thematic analysis (Braun & Clarke, 2006) relating to email use and its purposes, as perceived by the participants, primarily from the logs and interviews, with the email exchanges being used as evidence to verify or refute these perceptions. Whilst the prior adaptation theories, including the types of

adaptation, adaptation strategies and triggers for adaptations were the core constructs that guided our analysis, we remained open to other possibilities too. The data coding, following the process of thematic analysis, included searching for common themes, reviewing themes and defining and naming themes (Braun & Clarke, 2006). The process of the analysis was iterative in that the themes became more concrete in their depiction through repeated cycles of reading, with all the authors being involved in the process. Through this process, we uncovered interesting occurrences or replicated behaviour that could be intrinsic to understanding the construct of the events, situations and phenomena (Orlikowski & Baroudi, 1991), which appeared to correspond with or contradict the initial understanding regarding the adaptations. More detail regarding this case study is given in the following sections. For confidentiality purposes, some of information was anonymised and the participants were given pseudonyms, but this had no impact on the research outcomes.

Case Study: EAclient and EAsupplier

EAclient and EAsupplier established their buyer-supplier relationship in 2005, which had initially been built around EAclient purchasing from EAsupplier a key component for electronic display equipment, called for the purpose of this study, DP. In 2008, they developed a strategic partnership for co-developing a new technology product based on the co-design of DPs with a higher standard specification. Following this agreement, eight projects were formed between the two companies. Because EAsupplier was one of the very few DP designers in the world and EAclient had a strong capability of manufacturing, both expected that this partnership would help each other to achieve product innovation so as to survive in the global competitive market.

However, the relationship between the firms at the operational level was delicate, being fraught with conflict. For strategic reasons, there was a strong need to ensure the success of the joint projects. Hence, the CEO at EAclient told the employees that:

“The market is really competitive. We do need a strong supplier that can support our production with stable quality and quantity of goods... I know that you have been complaining a lot about working with EAsupplier, but our business cannot survive without their support... Please be patient and speak to them politely even when you are receiving unreasonable responses from them... Let’s try to work out the collaboration...”

Despite the CEO’s attempt to reduce the conflict and increase the spirit of collaboration, our

observation shows that an unpleasant working relationship persisted throughout the entire joint project process. The following log entry exemplifies this conflict-prone relationship.

It is difficult to work with EAsupplier. They never care whether our product to the market succeeds or not, but care about their own benefit. [Interview with EAclient R&D manager Chang]

Shin [EAsupplier's FAE manager] was angry and grumbling, "Your [i.e. EAclient's] request is ridiculous. The spec has been issued to the other customers, they are all happy with it. Only your company is not satisfied..." [Daily log]

Such complaints appeared often, including EAclient complaining to EAsupplier about their being unsupportive, whilst the latter criticised that the former was making too many unreasonable requests. Whilst the conflict and disagreements related to the product development and processes persisted, it was observed that the participants exercised great restraint by avoiding direct conflict and making bold attempts to manage communication in harmony, as shown in the conversations:

The EAclient's purchasing manager talked to an engineer, "...Even though the collaboration with EAsupplier may terminate one day, we shall have an amicable end-up...Be mature, do not make an open break. It can make a rift between them and us that may be hard to fix."

"...I can answer back but I try not to pick any quarrel. I don't want to be accused as a person with a bad manner or bad temper... They would say I don't consider others' feelings. ", said an EAclient's engineer.

Whilst it is our view that the participants dealing with conflict in a mild manner was seemingly related to the high relationship-oriented value found in the East Asian context, it was hard to extrapolate from the data whether this cultural stereotype held true in this case. However, it was clearly observed that the participants tended to inject harmony into the communication and thus, maintained the business relations, as expected in East Asian culture.

More interestingly, in terms of technology usage, in contrast to the general belief on the ineffectiveness of email in conflict management, the participants in the case study deliberately used emails to manage the underlying conflict and were able to deliver the project objectives successfully.

Analysis and Findings

The driving aim of this study was to explore technology adaptation for inter-organisational communication where the relationship was intense and full of conflict. In this empirical setting, in order to manage conflict during the collaboration process, the participants did not switch to or jointly use other communication tools and did not expand, modify or create new features of email, as predicted in previous research (Thomas & Bostrom, 2008; Thomas & Bostrom, 2010a). Instead, they stuck with emails and adjusted the way in which they used them so as to satisfy different communication purposes. Based on the thematic analysis, we specifically identified four strategies of adaptation when conflict was present: interaction avoidance, disempowering (the opposite party), blame protection and image sheltering. An extract from the analysis with the emerging themes is summarised in Table 1. These themes are presented in detail in the section that follows.

[Insert Table 1 about here]

Interaction avoidance

Far from being seen as a medium too lean for relationship maintenance, email was credited in this study with the property of *not-having-to-meet-them*. We term this as an adaptation for *interaction avoidance*, which we define as preventing participants from experiencing aggressive and direct confrontation with their co-communicators. That is, through refraining from having direct contact with the confrontational partners, the communication between the participants could be continued, although in a tepid atmosphere. The use of email here was motivated by the need to enact avoidance and keep the relationship alive.

The conversation below, recorded in the observation logs, shows one of the examples of interaction avoidance.

I [the researcher] asked Stephen whether we should have a meeting with EA supplier so that we can sort out this issue quickly... Stephen's eyes opened wide and he said to me, "No, no... I don't need a meeting. I don't want to meet them. They are such overbearing people. We won't have a comfortable result. I would rather use email."

Whilst shunning the idea of having direct contact with the collaborating partners owing to his animosity towards them, Stephen recognised that he would still need to maintain a dialogue and saw email as the best way to keep a low, but essential, profile. Another conversation between the researcher and EA client R&D engineer, Alan, sheds further light on the avoiding

behaviour. When conflict began to bite, meetings were no longer an option and email served to keep the relationship alive.

Alan continued complaining about EA supplier for a while, and then said to me “sorry, I don’t want to go to the meeting... I have no interest in knowing anyone from their company.” ...I responded, “... you can’t avoid them forever, can you?” He answered straightaway, “I’ll use emails...”

Below there is another instance of avoidance of direct contact, where a technological issue led to EA client’s Inspection Quality Department deciding to reject 1,500 pieces of EA supplier’s parts. The latter proposed holding a meeting, but EA client refused the request and expressed no concern about EA supplier’s misfortune. If the problem was not resolved soon, EA client would also suffer a large business loss caused by a reduction in sales. However, the EA client manager Chang continued to refuse to meet, and was not even prepared to make a telephone call. All he said was:

“They have to take all the responsibility. I don’t want to waste time having a meeting with them”. Chang continued using emails for inter-organisational communication.

Given the need to maintain an organisational relationship, it emerged that when conflict became apparent, email was used as a means to avoid open hostility that might have damaged inter-firm relations and hence, the fortunes of the company itself. On the other hand, the participants perceived that FTF interaction or a phone conversation could run the risk of the negative aspects of the collaboration being made explicit and thus, lead to irreversible harm. Comments like “I don’t want to meet them. They are such overbearing people...I would rather use email” demonstrate the potentially precarious nature of FTF contact.

Disempowering

The second purpose that email was adapted for was that of disempowering co-communicators. Evidence was found of this occurring through a particular tactic - *playing the silence card*.

Whilst conflict clearly existed in this case setting, the email content was rarely aggressive or hostile. However, we did find that silence between the email exchangers (e.g. no email or delayed response) was construed as an alternative tactic to deliver passive aggression. Here is an example. When a quality issue came up, EA client threatened to reject the entire shipment, if documentation was not forthcoming and EA supplier sent an email to say that they regarded the issue as having already been resolved.

Dear Chang

.....We thought that this issue was concluded after discussion between Stephen [EAclient R&D engineer] and Bob [EAsupplier's Customer Service (CS) manager]. But, you now raise a further issue which has confused the whole situation.

Best regards,

Shin

Chang was not happy with the email as he seemed to stand accused of raising confusion, but he took no further action. Two days passed and Chang had not replied to the email. The conversation below shows that he was upset about Shin's accusation and decided not to reply to the email.

Chang talked to his engineer, "He [i.e. Shin] sounded like he'd done everything we need but he hasn't. He did not mention anything about the change... It's not my fault if their products are rejected ...Let's wait and see. Shin or Bob will have to apologise for this mistake."

The no-reply strategy by Chang as a message of dissatisfaction seemed to work. EAsupplier's manager tried to send various follow-up emails, but he continued to remain silent. This led to the distress of EAsupplier's manager fearing the likelihood of EAclient rejecting the shipment, as shown in our observation data log:

The EAsupplier sales manager Eric came today... He was forced to go up the chain of command and contacted EAclient's chief project manager, thus carrying the responsibility of presenting his original failure to meet EAclient's demand.

Eventually, the problem was settled by a courtesy visit from EAsupplier's management to EAclient. This sequence of events illustrates how email was used to enact dissatisfaction and facilitated passive aggression aimed at getting EAsupplier to take the blame. In this case, Chang had played the silence card, which consequently forced EAsupplier's manager to make a courtesy visit, fearing that the silence signalled their product might be rejected, something they previously had strenuously avoided. Here, it should be noted that while this strategy of email adaptation seemed to operate successfully, it could lead to extra cost, i.e. the special effort of a courtesy visit or worse, it could have resulted in conflict escalation, if it was not managed properly. However, in this case, flaming behaviour was prevented and playing the

silence card allowed the participants to remain relatively calm.

Blame protection

Another strategy we identified is what we term blame protection. Given email's characteristic of recording, people store up information as evidence of the wrong doing of the other party and that can serve a no-blame goal. In this case study, the managers at EAclient valued the re-processable records of emails in the situation of conflict escalation with EAsupplier. It appears that they were keenly aware that the email record could be used as possible legal evidence if needed, as shown in the example below.

Chang is going to have a business trip in China tomorrow. He wanted Lee to be in charge of the issue of guarantee letter. He explained the details of this issue to Lee and talked to him, "...send me all the emails, at least making sure I am on the email list. Everything about this issue needs to be discussed by emails so that if there is any dispute we can prove that we are right. Do not trust EAsupplier's oral information."

The particular goal of using emails here was to be able to refer them back to the partners to indicate accountability. With the emails being sent on an ongoing basis, we found that the managers stored them as record so that they could become useful in future/potential disputes about responsibility, a behaviour manifested as a means to exert control.

In addition, this case study has shown a great deal of evidence that recordability (Jung & Lyytinen, 2014; Lee & Panteli, 2010) had blame protection as a major sub-goal and that email played a major role as a facilitator of this endeavour. This can also be seen in the example below in which email discussions snowballed between the EAclient and EAsupplier's managers.

Dear Eric, c.c. Shin and Bob

Under conditional approval, I have questions about PM type and ROM data,

1. Are you going to send someone to our company to verify the resolution on the T85 model?

2. If not, how will you apply the resolutions on the T85? Or have you already done this? About T85,

1. How can we recognize whether the ROM data has been updated or not?

2. Please issue an official document for the "T85" change today. All differences between the T75 and the T85 have to be clearly written in the document.

Best regards,

Chang

The EA supplier's manager responded to each question in detail by explaining who did what and when, e.g. "I already got the approval for the ECN from you", "I've already informed you of the name differences by the email dated 10/21", "If you need to confirm this, I'll send it again...", as the email below shows:

Dear Chang, please refer to my reply as below.

1. Are you going to send someone to our company to verify the resolution on the T85 model?

2. If not, how will you to apply the resolutions on the T85? Or have you already done this?

<Shin replied> You haven't used the T85 model yet. We have already changed all of the display units, giving them new ROM data. We will update them before input to your line. After this lot of display units, all of the DPs will be T85 models with PM type.

1. How can we recognize that the ROM data has been updated or not?

<Shin replied> Our CS Engineer will explain this to you.

To. Mr. Choi, please help with the question.

2. Please issue an official document for the "T85" change today. All differences between the T75 and the T85 have to be clearly written in the document.

<Shin replied> We already got the approval for the ECN from you. The meaning of the T75 and the T85 is about PM. I've already informed you of the name differences by the email dated 10/21. (If you need to confirm this, I'll send it again for your reference.)

Thanks.

Shin

We found meticulous detail in many of the emails relating to the product collaboration as well as promises being made, which were clearly written in this way to ensure that no blame could be conveyed on the message senders. However, the main point regarding this is that a person could be held accountable at any time for not fulfilling something they had guaranteed would be delivered in writing. That is, the email records could be and were used to shift responsibility for project outcomes onto the other party.

Interestingly, as our observation shows, at no time were past emails used explicitly in a blame game, as both parties knew this could be perilous to the collaboration. Instead, it was

noticeable that polite, yet platitudinous phrases were often present in the participants' transactions and served the purpose of upholding a ritual, thereby easing the growing tension and forestalling open conflict. Even after a shouting-like expression in one email (e.g. we WILL NOT agree), the respondent would subsequently, in the same communication, defuse further blame (e.g. thank you for your understanding).

Dear Eric

...we WILL NOT agree to you delivering the T85 before its failure analysis report is provided to us.

Best regards,

Chang

Dear Chang

...Due to internal material control, we have changed the model number from T35 to T45.

Thank you for your understanding.

With Best Regards,

Eric

It emerged that while EAclient staff talked about the co-work with EAsupplier in mistrustful and denigrating terms around the office, the great majority of the exchanged emails contained ritualised courtesy of the sort that is invariably used for email exchanges, but would have been difficult to convey with integrity in FTF conversation.

Image-sheltering

We define the adaptation of image sheltering as safeguarding one's professional image without allowing the weak command of the lingua franca to cause embarrassment. Communication internally within EAclient took place in Mandarin, whereas that with EAsupplier was mainly in English as the lingua franca and only secondarily, in Mandarin. A substantial use of email involving lingua franca communication was observed. The interviewees from EAclient stressed the function of its revisability (Dennis et al., 2008; Friedman & Currall, 2003), whereby they felt that the extra time to check an email before sending it meant that they could minimise misunderstanding.

“I would become very nervous if I have to communicate product details on the phone. Communication by email gives me more time to think and ponder over every word and sentence so that I have time to check whether or not I make my statements clearly...”

“Working with EA supplier is stressful. I can’t make any mistake so I prefer using emails which gives me time flexibility. But if I really have to discuss something urgently by phone, I write an email to confirm the content on the phone... Actually most of us do so.”

Moreover, the observation logs revealed that email was often used as a language leveller in that those who considered their spoken English as being weaker than that of the receiver of the message could spend time ensuring it was clear before pressing the send button. As one of EA client’s R&D engineers commented:

“Shin’s English speaking is better than mine. When I talk to him, I can’t explain clearly in English, especially when he interrupts me... If I can’t respond to him quickly, it is like that I accepted everything he said... I am experienced at electronic design, but somehow I felt that I was losing my power as I don’t speak English fluently.”

In the above conversations, difficulties with spoken English can be seen as an important reason for using emails. In particular, we found that the refusal to speak English was closely linked to the feeling of embarrassment. By implication, the non-native speakers seemed to suffer a status loss owing to their inadequate English and they felt incapable of dealing with a sensitive issue or difficult situation. In this regard, email protected the non-native speakers from feeling that they argued weakly, from having to deal with immediate feedback rapidly and safeguarded their professional identities by preventing them from feeling embarrassed.

By using the aforementioned four strategies of email adaptation, the collective projects were able to continue without having the conflict resolved (e.g. disagreements on the order allocations, time scheduling, product specifications, etc.). The findings derived from the evidence show that the specific adaptation strategies were triggered by conflict in a specific context, where the participants were involved in a cross-nation, -firm and -language environment that led to these strategies being quite distinct from those found in the prior research. In the following, we discuss the findings and their implications for both theory and practice.

Discussion

The findings derived from this case study have shown that email was adapted for managing conflict despite earlier research having indicated that this medium is considered insufficient for this purpose (Bjorn & Ngwenyama, 2009; Byron, 2008; Friedman & Currall, 2003; Maruping & Agarwal, 2004; Turnage, 2008). From the adaptation perspective, previous research has

suggested that ICT users, depending on the encountered situations, will adapt the use of ICTs in various ways (Sun, 2012). For example, Thomas and Bostrom (2008; 2010a) report that communicators might switch from using the current tool to another one or could use multiple tools to support their communication task needs. Alternatively, they can modify what they are using at a specific moment by upgrading some of the features or adding new ones. However, in our case study, we found that no such strategies were used; instead, the participants stuck with the use of email and adapted their behaviour accordingly, as a way of managing the conflict situation they were experiencing. That is, they did not replace or complement the medium with other media nor added any new features to it, but rather, changed the way in which they used it.

Instead of technology or task adaptation, evidence of behaviour adaptation (Barki et al., 2007; Beaudry & Pinsonneault, 2005) has been found, specifically in relation to email use. The different adaptation practices have provided evidence of both integrative and emergent adaptation practices (Schmitz et al., 2010). On the one hand, blame protection and image sheltering are examples of integrative adaptation practices because they helped to protect the continuation of the project. On the other hand, disempowerment and interaction avoidance are emergent adaptation practices that were enabled as a result of using email in a way that involved doing new things. Specifically, the participants exploited the features of email through purposeful adaptation of their behaviour so as to fulfil four criteria that would ensure the collaboration continued in a conflict situation, namely, interaction avoidance, disempowering, blame protection and image sheltering. In the following, we discuss the theoretical implications derived from the above findings. In particular, we add theoretical knowledge to research areas on conflict-triggered technology adaption and adaptation in the cross-border linguistic context.

Conflict-triggered adaptation

In prior research on technology adaptation, as aforementioned, it is argued that in order to meet the various needs of communication, ICT users will appropriate or adapt the technology in unexpected ways (DeSanctis & Poole, 1994; Majchrzak et al., 2000). Previous research has shown that adaptation, either in the form of technology or use of technology, can be triggered for several reasons, e.g. inadequacy of an ICT to meet the communication needs, communicators' trust and/or relationship inadequacy (Davidson & Chismar, 2007; Thomas & Bostrom, 2010b), novel situations and discrepancies (Sun, 2012). The findings of this study add to the extant literature by showing that conflict is another trigger of adaptive processes.

[Insert Figure 1 about here]

The model derived from the research findings (illustrated in Figure 1) has shown how one specific trigger, conflict, can contribute to strategies being engaged with as a way of managing, although not resolving, conflict, in order to allow projects to continue. In this regard, whilst a substantial amount of research has emphasised countering the leanness of email and thereby, improving the communication process by upgrading the medium used, we found that under the described conflict situation, the very leanness of email was appreciated and thus, exploited by the actors involved to manage the conflict at hand. That is, instead of switching to another communication medium, thus showing technology adaptation, the email communicators utilised the leanness of email and adapted its usage through a series of strategies as a way of managing their inter-organisational relationship.

In this way, the choice of email was not just a medium of communication; it also served to provide support to maintaining the international partnership when other means failed to achieve the purpose due to the negative emotions involved. The adaptive email use enabled distance to be maintained with partners, whilst allowing for a focus on the task at hand rather than on the relationship. As such, it can be said that email became a strategic resource for the organisations involved. The series of emails that was carefully constructed enabled the them to maintain continuity of the partnership in a tactful way. Whilst when a different format to that normally employed was used, this could lead to non-response, which happened in our case when the buyer who performed this behaviour was attempting to increase his power in the exchange (i.e. EAclient). The use of email and the messages within did not represent the conflictual relationship that existed between the organisations involved. Instead, the usage, both verbal and non-verbal through silence, was carefully chosen to deal with specific issues both tactfully and strategically. Nevertheless, it has been noted earlier that using this adaptation strategy might lead to extra cost, such as having to make a courtesy visit and potential conflict escalation. However, in this case, playing the silence card prevented the participants from exhibiting flaming behaviour and any risk of open conflict was quelled through an FTF meeting. Earlier research has shown that power dynamics is evident in the way emails messages are constructed (Murphy & Levy, 2006; Panteli, 2002) and our study expands research in this area. As such, the general rise of email exchanges is more than just a shift with regards to communication medium. The heavy reliance on email and communication technology, in general, has undoubtedly transformed the pattern of how information, emotions and disagreements are

communicated and thus, it could be argued that it has profoundly influenced the ways in which companies interact with each other.

As this research evidence on the interaction avoidance strategy has shown, EAclient occupied a position that customarily should engender a measure of deference. So, when the EAclient employee refused to have meetings or telephone calls and insisted on the use of email he clearly wanted to protect the strategic partnership and to avoid any potentially damaging escalation of conflict. This allowed the persons involved to handle the relationship in a cooperative manner despite the difficult relational circumstances. Moreover, from the perspective of blame protection, they stored the records for future reference and for accountability purposes. This finding is consistent with that reported in prior research regarding media selection (Jung & Lyytinen, 2014; Lee & Panteli, 2010), concerning the advantages of recordability in email usage. During this study, it was often observed how on receipt of a salient email from an employee in the collaborating firm, the receiver would then forward it to team members and appropriate managers. In so doing, they were disseminating the history of the email exchange to all recipients as all prior emails were attached. This behaviour was geared towards blame avoidance, whereby any accusation by the other party that they were not behaving constructively could be easily refuted by the evidence. In our empirical study, we also observed that this protection was strengthened through the constant sending of over-courteous informal messages, which on many occasions appear to have been quite disingenuous. That is, while the participants in EAclient talked about the collaboration with EAsupplier in distrustful and denigrating terms around the office, the vast majority of the exchanged emails were still written in a polite manner and contained ritualistic courtesy. This helped to prevent explicit relationship conflict (Hinds & Bailey, 2003; Jehn & Mannix, 2001) when task and process conflict were apparent to both parties. This way of conflict handling would probably not have been possible through other media, such as FTF meetings or during teleconferencing, as the facial expressions could reveal how participants from both parties truly felt about each other.

Adaptation in the cross-border linguistic context

In addition, the case setting in the East Asian context offers the opportunity to discuss the role of language in the ICT adaptation process, especially within the culture in this region, which is known for its caring relationship-oriented values (e.g. Gao et al., 2010; Leung et al., 2002) and a desire to maintain harmony (e.g. Tjosvold & Sun, 2002; Wang et al., 2012). It is evident in

this case that the participants perceived the needs of preserving harmony even when they were experiencing conflict, but we could not determine to what extent culture has played a role in managing conflict from our data. Whilst we did not set out to compare Western and Eastern cultures in relation to conflict management or email communication, we do believe that the cultural context of our research had an impact on how the communication between the focal firms proceeded. Hence, we accept that in a different organisational context, the process of adaptation would most likely be different from that revealed in our empirical findings.

In this study, language difference has been found to play an important role in this case of cross-border communication. In the foreign language communication environment, the limited capability of the speakers caused difficulty in terms of meanings being expressed fully and accurately. Prior research studying negotiations has revealed that lacking language fluency can be perceived of as suffering from status and/or power loss (Brett et al., 2007; Hinds et al., 2014; Neeley, 2013; Vaara et al., 2005; Welch et al., 2005). Neeley (2013) found that non-native speakers of the company's lingua franca, English, suffered a status loss and felt disempowered when dealing with their native-speaker colleagues. In this study, with both parties using English as the lingua franca, we also found that the capability of English speaking was perceived as a power contest. That is, lack of English fluency was seen as power or status loss, despite both parties being non-native speakers. Whilst this phenomenon has been discussed in prior studies (Vaara et al., 2005; Welch et al., 2005), our case includes the concept of email use to surmount any communication difficulties. That is, asynchronicity of email was seen as an asset, as it gave the message senders sufficient time to check the contents of their communication before it was sent (Crystal, 2007; Waldvogel, 2007). This saved the participants with weaker fluency in English from having to expose their weakness and hence, helped maintain their professional image. This situation was noticeable in relation to both sides of the collaboration, whereby the asynchronous medium of communication protected the users from being put on the spot, from showing their incapability to argue competently and from having to deal with immediate feedback.

The above findings in the East Asian context appear to contradict those from prior ICT research in relation to conflict management, which reports that the use of email can enhance the likelihood of conflict escalation (Friedman & Currall, 2003) or raise the problem of conflict management (Maruping & Agarwal, 2004). However, most of these settings were in the Western context, or just involved considering an Eastern partner as an auxiliary. Through this

study, we have contributed to communication theories by showing that the email communicators used the leanness of the technology to adapt their behaviour to complete the collaborative projects. Nevertheless, we are not suggesting that email is a rich medium in any way, as it is not, but it is indeed useful owing to its flexibility, which allows communicators to adapt their behaviour to that appropriate for managing conflict. In particular, in our case, inadequate language capability to use the agreed lingua franca meant that some of the communicators needed to rely on the medium's revisability to maintain the desired relation-oriented values in East Asian culture and thus, avoid escalating the perceived conflict.

Conclusion, Limitations and Further Research

Despite prior research having recognised that the concept of adaptation is crucial in changing uncertain and complex organisational settings, it has usually focused on discussing technology adaptation involving technological change or upgrade. In this paper, we have specifically examined how individual members adapt a specific aspect of working practice when conflict arises. The research data and findings presented have brought three key contributions to the field. Firstly, we have forged a link between technology adaptation and communication purposes. In our case, four adaptations are evident, i.e. interaction avoidance, disempowering (the opposite parties), blame-protection and image-sheltering. Secondly, despite email's inherent limitations, which can contribute to conflict, as prior research has elicited, our outcomes suggest that adapting behaviour when using this technology can be a practical way of handling conflict so as to ensure that a project is continued. We do not claim that the focal projects were continued only due to technology adaptation, but rather, that different email features can be appropriated in a manner that enables disputants to continue their communication, which is clearly something positive for the collaboration. Thirdly, in the cross-cultural linguistic context, where negotiating an agreement with tact and diplomacy is very challenging among non-native speakers, email can serve to release the tension of lingua franca communication through adaptation of its usage. In this East Asian context, conflict handling in the inter-organisational cross-cultural linguistic setting was so low key that it could not have been detected in any other way than through the case study that we conducted. Without paying attention to the context of technology adaptation, it would be difficult to understand the business tug-of-war. Our focus on adaptation from the point of view of email communication in conflict situations can help open up avenues of research in relation to the daily practices regarding inter-organisational interaction.

The research findings have implications for management practitioners by having revealed the email adaptation strategies for managing conflict. That is, while email is still the dominant communication tool in a cross-border business context, we believe that the need to adapt this technology for managing conflict is imperative. We agree that it is difficult, perhaps almost impossible, to resolve conflict by emails, but it is apparent from the case study that conflict can be handled and managed by their adaptation. The participants in this case did not replace or complement the medium with other media nor did they add any new features to it, as prior research has asserted. Rather, they changed the way in which they used it. This study has shed light on the interrelations between the adaptations and conflict management. There is evidence of behaviour adaptation, whereby adaptive email use contributed to the continuance of the collaborating projects.

One of the limitations of this study, perhaps the most significant, is the difficulty of obtaining direct responses from the supplier company, EAsupplier, through interviews. Moreover, this researcher's dual role in the participant observation had its limitations, because given that the case being observed involved conflict, undoubtedly, she was viewed as being positioned on one side of this phenomenon. In particular, EAsupplier people saw her as representing EAclient, with a bias towards that firm and hence, were reluctant to share their true feelings in interviews with her regarding conflict in the collaboration. Nevertheless, a substantial amount of other data was gathered, which allowed for the feelings of the participants from the supplier company to be understood. Furthermore, the embedded position of this researcher in EAclient has enabled the collection of rich data in a natural setting. While the findings could be particularly important for inter-organisational project teams involving East Asian businesses, we believe this study has general implications for inter-organisational partners who might wish to forestall and handle conflict. Proposed areas for further research include investigating the influence of communication technology on interactions between multi-lingual teams in their organisational context and examination of how multiple tools are utilised and embedded within globally dispersed, cross-cultural teams and organisations. In sum, both researchers and managers need to attain an understanding of the most effective use of communication media so as to maximise performance during global business collaborations.

Acknowledgements

The authors would like to thank the anonymous associate editor and reviewers for their insightful comments in the review process. This work was supported in part by the Ministry of

Science and Technology of the Republic of China under the grant NSC 100-2410-H-155 -009.

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Table 1. Primary findings extract from thematic analysis

Data extract	Coded for	Initial themes	Named themes and definitions
<p>Chang wanted Lee [EAclient's R&D engineer] to call a meeting with Shin to sort out the issues with the technology. Lee was reluctant to do so and said to me¹, "I had an argument with Shin some days ago. I really don't want to meet him, you know". For several days Lee requested a meeting with Shin as he kept saying he was too busy to have one...</p> <p>The meeting was finally agreed. When Shin arrived, Chang suddenly said to Lee that he wouldn't join our meeting. However, Shin was already in our office, and Lee couldn't cancel the meeting. So finally, Lee asked me to attend the meeting with him. On the way to the meeting room, Lee was unhappy and said "Chang was the person who had been insisting on holding a meeting with EAsupplier, but he did not want to attend!? Why me? I don't want to meet them either!?"</p>	<ul style="list-style-type: none"> ● enable communication to be continued without having to meet the confrontational partners ● Avoid direct conflict 	Avoiding intensive communication, as an emergent adaptation	Interaction Avoidance. The email adaptation allowed users to avoid conflict and enable communication being continued.
<p>Stephan asked Chang anxiously, "are you not going to reply this email? Without our approval, the 100 pieces of EAsupplier's samples will be rejected by the Quality department today!!" "I don't care! Shin needs to take all the responsibility", Chang answered coolly.</p>	<ul style="list-style-type: none"> ● Humiliate the opposite party by not replying to email ● Convey passive aggression 	Humiliating the opposite party, as an emergent adaptation	Disempowering. The no-reply strategy allowed users to convey passive aggression
<p>Chang talked on the phone angrily. The other side was John... "Nonsense! Are they threatening me!? We had waited for their updated specification for two months but they wanted me to prove it within two hours! Ridiculous!! You are not asking me to prove it even without checking the content, are you?"</p> <p>Chang then wrote an email to denounce the EAsupplier's manager for causing the delay and should take the responsibility. Dear Eric [EAsupplier's sales manager]</p>	<ul style="list-style-type: none"> ● Store up information as evidence of the wrong doing of the opposite party ● Keep a record of requests and promises made to document action taken 	Evidence recording, as an integrative adaptation	Blame-protection. The email adaptation allowed users to keep records of requests, promises and even evidence of the wrong doing of the opposite party for the aim of blame-protection.

¹ Outside quotations, I and me in the logs refers to the researcher.

I don't understand why this simple specification would take you two months to complete

31/July - Specification released from EAsupplier

1/Aug – EAclient asked for clarification regarding some mistakes and unclear information

29/Aug – EAclient asked again for clarification, but have no reply till today [5/Oct]

We've been trying very hard to review your spec as quickly as we can. If you could correct the spec, we could approve it by today. This is now in your hands, Thanks!

Best regards,

Chang

I don't speak English fluently. Discussing complex technological issues by phone is sometimes difficult for me...If I use email, it won't be a problem. I could use the dictionary to check the words that I don't understand. [Interview with the EAclient's R&D engineer]

- Have time to ponder words/sentences in lingua franca communication
- Prevent suffering from embarrassment owing to inadequate English language skills

Prevent from embarrassment, as an integrative adaptation

Image-sheltering
This adaptation allowed users to ponder the words/sentences when communicating in lingua franca and thus prevent from embarrassment.

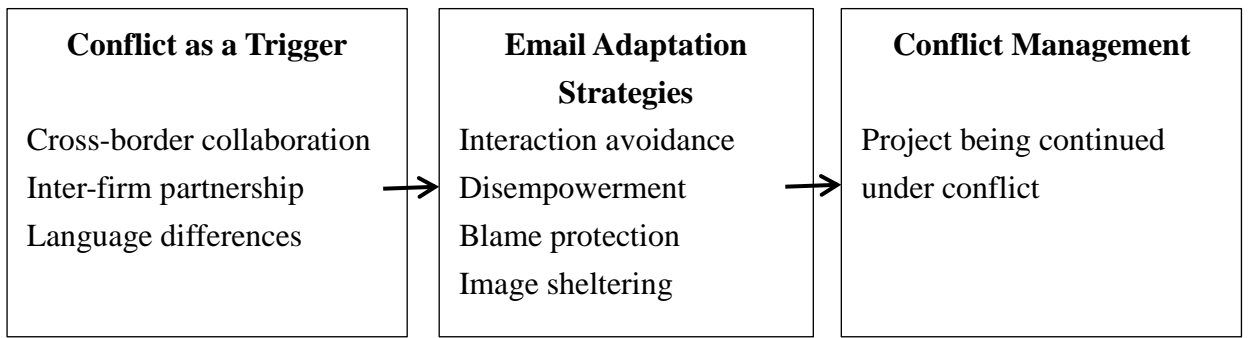


Figure 1. The model of conflict-triggered email adaptation strategies

Appendix A. Sample observation log

Date: 10/Sep. (Mon.)/Venue: EAclient Headquarters

(9.30am) specification check

(11am/Event: EAsupplier to provide quality) Lee and me got an email from Chang [Chang was in China]. There was only one sentence in the email: “dear joyce, this attached letter is full of traps.” I had no idea why he did not tell us what to do with this letter but only mentioned about traps. I supposed that he did not want us to reply this email or prove the letter mistakenly. I don’t understand why he especially wrote to me, either. He knew that the person in charge of the quality issue was Lee, but he wrote “dear joyce”. Perhaps he just typed it quickly and did not really mean it.

(11:30AM) Lee explained to me what is going on about the guarantee letter. I understood that it is a complex matter related to compensation. We decided to deal with it later when Chang comes back from China.

(2pm/Event: DP series approval) I got a phone call from Mary for talking about the approval of DP V2.0. She told me that we needed to speed up the DP approval on this version. However, I was confused by her talk as she mentioned five or six DP versions in our phone conversation. She said, “EAsupplier has been waiting for Chang’s approval for a couple weeks. If we don’t approve it as soon as possible, we will not have their supply for next month. I am forwarding an email from EAsupplier to you. You shall understand that this is very important. We are going to have a meeting at 2.30pm. Can you and Stephen attend this meeting represented Chang?”
(Mary sent me the EAsupplier email to Stephen and me, dated 10.Sep., sent by Shin, title: DP V2.0 approval, urgent!!.)

In fact, I didn’t know this version of DPs very well. I did receive emails from John, Mary and Chang talking about them but I didn’t really pay attention on them because Chang dealt with the DP approvals by himself. Now Chang was away for a business trip in China so Mary asked Stephen and me to attend a meeting for reviewing the DP.

I said to Mary that I am not capable to help this issue because I didn’t know its arrangement. She said, “You still have time to check the emails before the meeting. If you still don’t understand the whole story. I am happy to explain for you.”

“um...”, I was hesitated. She continued, “You must understand how desperate we need your support. You don’t have to really understand DP situation entirely. I can explain the whole story to you. But what we really need is your knowledge on the DP specifications.” She tried to persuade me to attend the meeting and went on and on. I finally promised I would attend the meeting with Stephen.

Stephen returned to his seat. I said to him about my phone conversation with Mary. We then did a research about this DP. I drew out the relevant emails from the DP folder set in my Outlook and tried to piece together the situation of DP from a mountains of emails. Stephen was also reviewing his emails and trying to get understandings about this version of DP. We then attended the meeting together.

(2.30pm/Event: DP series approval meeting/attendance: Mary, John, Zed, Stephen and myself) Mary invited purchase manager John and Zed [purchase team member] to participate in this meeting too. John illustrated that the demand of DPs for next month. He also implied that because Chang did not approve this DP so that they could not place the orders and said that this may cause delay for production. They planned to purchase six modules of DP including three modules for project #20, two modules for project #40 and a module for project #46 and #50. John explained that he would ask for DP supply from a Chinese supplier but there is still 15K shortage.

The purchase plan was only based on business concern without technical and manufacturing management views. I was worried about the purchase plan as the specification has not being reviewed. Personally, I don't think that Chang will agree with the Chinese DP maker's input as their quality was not stable. Also, Mary being a project leader looked quite confused too. It might because Mary is the project manager of #20 and #40 so that she did not know the other projects. (I don't know, just guessed)

Mary insisted to have this version of DP approved by tomorrow so that the EAsupplier's DP supply can meet the production and marketing schedule. She said, "I know that it is important to keep high standard of DP quality so Chang always spends lots of time to test and evaluate DPs. We appreciate. But the quality is acceptable, he doesn't have to set a high ...". Stephen interrupted her and said, "how do you know?"

"It passed through the pilot run." Mary answered.

"It was just a small number of products tested in the pilot run. You can't say the quality is accepted."

"If so, why do we need to do pilot runs?"

Stephen answered back, "pilot runs are not for evaluating the quality of DP but for testing the other product functions and the assembly."

I thought that Stephen was right but I didn't say anything and listened to them. I could feel that the atmosphere was tensing up.

Mary raised her voice and said, "so you are not going to approve the DP, are you?"

Stephen answered, "I didn't say that. I just said that we did not know whether the quality of DP is accepted or not."

Mary asked, "so, what are you going to do now? Approve it or not?"

"We don't know yet. We have to check the specification carefully and discussed with Chang."

Mary pretended that she was going to faint, and said “Oh come on, Chang is in China. He can’t evaluate the DPs in person, OK?!”

Stephen continued, “I know that the time schedule is important, but I don’t think that you should take EAsupplier’s side. They knew that we have very tight schedule and wanted to sell us the low standard goods. That is not allowed”.

Their quarrel lasted for a few minutes.

Stephen and I decided to bring back the information we had in the meeting and would skype Chang for a discussion. Mary said that she would email all team members to clarify the DP plan so that our discussion could be based on clearer information. (This meeting took about 1 hour).