Abstract
This paper examines the contribution of digital technology and interpersonal contact to social exchange – the latter being central to business-to-business relationships and a recurring theme in IMP and related research. Interpersonal contact represents an important means through which dialogue happens, information is shared and trust is established via the social exchange that occurs. These interactions have long been recognised as central to the development and functioning of business relationships.

In the last two decades interest has been directed at the impact of information technology on inter-firm relationships, including the interaction process and exchanges as part of this process. While technology enables more efficient coordination of inter-firm activities (such as product, financial and information exchange) its contribution to social exchange via interpersonal contact and related information sharing is less clear, principally when more recent applications of online communication are considered, and social media in particular.

Social media have transformed communication in consumer markets, enabling information provision and sharing as well as company-consumer and consumer-consumer dialogue. In business markets, social media is not implemented to the same degree. Research has found various uses for social media in business-to-business marketing including brand building and relationship development (Brennan & Croft, 2013). Our interest lies in determining how social media are used appropriately at different stages of inter-firm relationship development, and how interaction and dialogue via such media contributes to the relationship atmosphere between the parties.
Keywords: Social media, Interaction approach, Task media fit

Introduction
Whilst social media is transforming communication in business–to-consumer markets, its use is not developing as readily in business-to-business markets. Research in B2B contexts has confirmed the importance of social exchange, particularly interpersonal contact in interactions between companies (Hakansson, 1982; Cunningham & Turnbull, 1982). The social exchanges play an important role in information sharing, the reduction of uncertainty, the reduction of the technological, cultural, geographic, social and time distances (Ford, 1980), and the various types of risk (Gemunden, 1985). Over time successive social exchanges lead to the development of long-term relationships and an increase of trust and commitment between the two parties (Hakansson, 1982). During the last thirty years there have been substantial developments in information technology that has led to the creation of a number of new communication channels. Research has aimed to identify the appropriateness of using certain media for specific tasks, which has led to the task media fit framework (Daft & Lengel, 1986; McGrath & Hollingshead, 1993). This model suggests that using the appropriate communication media will lead to increased level of satisfaction with the interaction (Suh, 1999; Benbunan-Fich et al., 2003; Wilson, 2003), which will positively affect the relationship atmosphere between the parties and influence the stability and longevity of the relationship. This paper aims to examine more closely how social media can be used appropriately within a business-to-business marketing relationship throughout its development.

The Use of Social Media in B2B Markets
Social media communication platforms include networking sites such as Facebook and LinkedIn, discussion forums, blogs and microblogs such as Twitter, and content sharing sites such as YouTube, Vimeo and SlideShare. In research conducted in a business-to-business context, 93% of companies sampled thought social media was increasingly important and the most commonly used social media tools were Twitter, Facebook, YouTube, LinkedIn, Foursquare (Johnson, 2012). In relation to this growing importance, broad objectives that companies sought to achieve via social media channels related to brand building and the monitoring of company reputation (Toppi et al., 2013), enabling co-creation and contribution to innovation (Juhan Jussila, Kärkäinen & Leino, 2011; Toppi et al., 2013; Ylimaula & Ulkuniemi 2013), sales prospecting (Brennan & Croft, 2012; Buyersphere, 2013; Michaelidou, Siamagka & Christodoulides, 2011) and information sharing, problem identification and resolution, and customer service (Brennan & Croft 2012; Castronovo & Huang, 2012; Johnson 2012; Sashi 2012). While these objectives might be largely associated with marketing communication activities, less clear is how (or whether) social media might be used to facilitate interactive business relationships.

The Interaction Approach
The interaction approach captures the complexity and diversity of relationships between companies in business markets. Between the companies the interaction process consists of exchange episodes, which includes the product/service, financial, information and social exchange (Hakansson, 1982). The exchange of the product or service is essentially the core of the exchange. When a relatively simple product is exchanged the degree of interaction is likely to be low, however when there is a degree of need, market or transaction uncertainty, interaction is likely to be higher (Hakansson, Johanson & Wootz, 1976). Financial exchange is an indicator of the economic importance of the relationship and the greater the amount the
greater the interaction. The information exchanged between the parties may be technical, economic or organisational. Organisations are made up of people who inevitably engage in varying degrees of social exchange, e.g., the intangible value of conversation between buyers and suppliers. Successive exchange episodes between the parties can lead to the development of the relationship atmosphere, which encompasses trust, commitment, the development of a long term relationship and the locking together of the two firms.

As the episodes lead to the development of long-term relationships, the communication and exchange within each episode needs to be clear to both parties. Impersonal communication channels, e.g. e-mail, are used to exchange basic technical and commercial info whilst personal channels, e.g. face-to-face (FtF) meetings, are used to exchange “soft” information concerning the use of a product, the conditions of the agreement or general information about each party. The degree of formality is also important. More formal relationships will have written contracts and more informal relationships will have unwritten contracts. The degree of formality can influence the atmosphere of the relationship. Formal relationships may be more distant, perhaps less trusting whereas more informal relationships may be closer, more trusting, and committed. Within these relationships social exchange occurs, which serves a number of functions such as reducing uncertainties due to factors such as cultural and geographic distance. Interpersonal contact, which forms a part of social exchange, has been found to serve a number of purposes including information exchange, assessment, negotiation and adaptation, crisis insurance, social and ego-enhancement (Cunningham & Turnbull, 1982). The tangible benefits from interpersonal communication include innovative developments (Walter, 1999) and an increase in sales performance (Ahearne, Gruen & Jarvis, 1999) Intangible benefits include improvements in supplier credibility and reduced uncertainty and risk (Cunningham & Turnbull, 1982). Over time social exchange leads to the development of bonds between the actors in the relationship, building trust through personal interaction. With the development of social media there are a number of newer channels available for companies to incorporate into their communication mix. Research is required to determine how suppliers and buyers use them prior to, during and after their exchange episodes.

The Use of Information Communication Technologies for Different Tasks

Since the interaction approach was initially put forward, developments in information technology have opened up a number of new channels of communication through which exchanges can occur. This has led to a considerable amount of literature on the suitability and appropriateness of media for various types of tasks. Media richness theory states that the use of different communication media affects task performance (Daft & Lengel, 1984; 1986). The theory presents a hierarchy of media arranged from a low degree of richness, e.g. flyers, to the highest degree of richness, e.g. FtF contact (Lengel & Daft, 1988). Three criteria determine the richness of media; the availability of instant feedback, the capacity of the medium to transmit multiple cues, and the personal focus of the medium (Daft & Lengel, 1984; 1986). The theory suggests that task performance will be improved when the task information processing requirements are matched with a media able to convey the richness of the information required. McGrath and Hollingshead (1993) modified the media richness theory to produce the task-media fit model, which identifies the most appropriate media for different tasks (See Figure 1). The best fits between media and task lie along the diagonal, task media combinations in the top-right of the diagonal are potentially too rich and task media combinations in the bottom left of the diagonal are potentially too lean. A rich medium such as FtF contact is necessary for negotiations, whereas a lean medium such as a memo is adequate for the exchange of a straightforward message (Suh, 1999).
Figure 1: McGrath and Hollingshead’s (1993) Task-Media Fit Model.

<table>
<thead>
<tr>
<th>Task type(s)</th>
<th>Communication Media</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increasing potential richness of information</td>
</tr>
<tr>
<td></td>
<td>Computer text systems Audio systems Video systems Face-to-face communication</td>
</tr>
<tr>
<td>Generating ideas and plans</td>
<td>Good fit Marginal fit Poor fit Info to rich</td>
</tr>
<tr>
<td>Choosing correct answer: intellective tasks</td>
<td>Marginal fit Medium too constrained Good fit Info too rich</td>
</tr>
<tr>
<td>Choosing preferred answer: judgement tasks</td>
<td>Poor fit Medium too constrained Good fit Marginal fit info too rich</td>
</tr>
<tr>
<td>Negotiating conflicts of interest</td>
<td>Poor fit Medium too constrained Poor fit Info too lean</td>
</tr>
</tbody>
</table>

A considerable amount of research reinforces the task media fit model and the necessity of choosing the appropriate method of communication for a particular task. Negotiation tasks carried out in a FtF context resulted in greater turn taking, more information exchange, more discussion, more questions for clarification (Morris, Nadler, Kurtzberg & Thompson, 2002), and greater rapport that improved the outcome (Tickle-Degen & Rosenthal, 1990). On the other hand computer text systems have been found to be suitable for conveying information for idea generation (Murthey & Kerr, 2003), but less appropriate for other tasks. For example, Postmes, Spears and Lea (1998) found people were not as constrained by etiquette and norms when negotiating via a computer, and in comparison to FtF interaction people asked more direct and intimate questions in text-based computer-mediated communication (CMC; Tidwell & Walther, 2002). Individuals were more likely to imperil relations by making more threats and issuing more ultimatums than in a FtF situation (Dubrovsky, Kiesler and Sethna, 1991) and e-negotiators are more likely to suspect their opposite of lying and deceiving (Fortune and Brodt, 2000).

More recently it is clear that the task-media fit model requires further refinement to allow for the use of social media. Simplistically, social media could be considered to fit within the computer text systems. Within this classification of communication media, change has occurred in the criteria determining the richness of the media. Previously feedback may have been delayed (asynchronous), but is now more instant, e.g. instant messaging, and chat push notifications. The degree of personal focus inherent in social media platforms is also variable in that it can enable strongly personal focus, e.g. private messaging on Facebook, a semi-personal focus, e.g. a group message or event on Facebook, or a public focus enabling any interested party to observe or participate, e.g. a company page on Facebook or open Twitter feed. Social media enables contact between the customers and stakeholders of suppliers, which has not been easily accessible via more traditional communication channels. Taking account of the variation of these criteria, the appropriateness of social media as a channel (or
array of channels) for task completion has not been investigated. CMC has developed rapidly since the development of the task media fit framework. The present research seeks to examine its validity in the context of social media as an appropriate channel(s) for specific tasks.

The Use of Social Media in a B2B Relationship Development Context

Previous studies have begun to identify how social media is being used in a B2B context. Many of the objectives are concerned with the provision of information and marketing communication (Useful Social Media, 2012) for brand identity purposes (Toppi et al., 2013). What is less clear however, is whether and how social media might be used for relationship handling and specifically the initiation and development of relationships between supplier and customer companies.

Provision of information is vital when trying to create awareness of a supplier and its products. Edvardsson et al. (2008) in their model of initiating relationships, identify a stage where the parties, i.e. supplier and buyer, are not recognised by each other. At this point a supplier may utilise social media to raise awareness of the company and bring themselves to the attention of potential customers. One factor that Edvardsson et al. (2008) state is important in developing relationships is the product or service offering. Therefore it is vital to incorporate social media into the communications mix and use it to convey such information. Certain factors may inhibit the development of a relationship such as a negative reputation therefore suppliers need to utilise social media to clearly convey their positive image. If the supplier is involved in negative incidents then social media could be utilised to counteract potential harm to their reputation. Research needs to identify whether and how companies are utilising social media for this purpose.

Assuming that parties are aware of each other, companies are then in the considered (Edvardsson et al., 2008) or pre-relationship stage (Ford, 1980) Both models consider the factors influencing the customer’s decision to do business with the supplier. According to Ford (1980), in the pre-relationship phase the company needs to reduce uncertainty and the technological, social, cultural and geographic distance with potential customers. Customers will be uncertain about the costs and benefits of doing business with a new supplier. They may be concerned about the technological distance with regard to the product and the processes between the companies. The companies will be unfamiliar with how each other work, i.e. the social distance. The cultural distance, i.e. differences in the organisations’ culture and norms, and the geographic distance between the parties also need to be considered when deciding whether the parties can do business together. Similarly, Edvardsson et al. (2008) in their relationship initiation model suggest that certain factors i.e. the service offering, trust and time move a relationship from one stage to the next. They also suggest that inhibitors such as the level of risk and relationships with other companies in addition to a negative image mentioned earlier may prevent companies from moving a relationship forwards. Various types of risk may occur to inhibit the development of a relationship such as, functional, financial, psychological, social (Gemunden, 1985) and time risk (Ross, 1975). Functional risk reflects concern that the product may not perform to a satisfactory standard; this increases if the product is technically complex or related to health and safety. Financial risk may be considered important if there is the potential to lose money or fail to obtain a return on investment. Physical risk refers to whether there is the potential for harm to users or end consumers. If there is a danger of the product becoming obsolete then the buyer will perceive a time risk. Psychological risk refers to any potential damage to
the buyer’s self esteem and social risk refers to the potential harm if superiors or colleagues do not approve of a purchase decision.

At this early stage when the companies may have little or no experience of each other, social media in the wider communications mix could be one of the sources of information used to alleviate some of the risks and uncertainties to reduce the distance felt between the companies. Social media needs to be incorporated into the supplier’s communications mix appropriately in order to reduce risk, uncertainty and the various distances between itself and the buyer. As yet research has not examined how this could be performed in a B2B marketing context. Suppliers could, for example, develop videos, which could be uploaded onto their YouTube channel and Facebook page. The videos could address various aspects of the supplier’s work such as the products and their performance, the research and development department and the after sales service. The videos could also include customer testimonials. The provision of clear factual information via the videos could reduce uncertainty, specifically the technological distance and the functional and potentially the time risk whilst affirming the supplier’s capabilities. Announcements on Facebook and Twitter about innovative developments, contracts awarded and delivered on and any industry awards received may contribute to reducing the buyer’s functional risk and technological uncertainty. Information about contracts won and delivered could specifically reduce the buyer’s psychological and social risk, as it would enable them to observe the calibre of other companies with whom the supplier works and reassure them that they can produce results. This information could potentially reduce perceptions of cultural and geographic distance if the buyer can see the supplier works with buyers in the same country as themselves. Announcements about industry awards and testimonials from current customers would reduce the buyer’s psychological and social risk as it would confirm that the supplier is respected within the industry. Comments from current customers and other stakeholders readily available on various social media platforms such as Facebook, YouTube etc. could reduce the social distance and potentially the technological distance if they are positive, reassuring the potential buyer. However, any negative comments may increase the level of risk or increase the various distances and damage the reputation of the supplier which may inhibit the development of the relationship. The precise nature of the customer comment and its influence need to be examined in more detail.

At the development stage (Ford, 1980) of the relationship the parties will begin to gain experience in dealing with each other. They will be dealing with issues of integrating the product into the customer’s operations, making adaptations etc. so the technological distance will begin to reduce. The geographical and cultural distance between the companies will begin to lessen as the parties interact. Through interactions the social distance between the parties will lessen, the level of trust between them will increase and they will be gaining knowledge about the degree of commitment they have towards each other. It is anticipated that FiF interaction in the development stage will significantly contribute to these developments. The role of social media at this stage is not clear; potentially the communications on social media from other customers and stakeholders may continue to provide reassurance for the buying company. This information will confirm the buyers have made the right choice. Of course buyers may exercise a degree of caution when reading such comments as they may not be aware whether the supplier removes negative comments from SNS, communities etc. At the long term relationship stage (Ford, 1980) the uncertainty and the various distances have been reduced to a minimum level. The communication patterns between the parties and the relationship is potentially personified in a few strong personal relationships. It is not clear whether at these two later stages of the relationship lifecycle
whether social media has a role to play in developing and maintaining interactions and the relationship between the parties. For example would a long term purchaser feel the technological distance is reduced further if they learnt the supplier has won an industry award or if the distance was small already would it maintain that distance?

In these more established relationship stages there may be a variety of different tasks that the parties need to work together on, or there may be a task that the supplier wants to work upon with its customers and other stakeholders. As identified earlier these tasks might involve the resolution of problems (Brennan & Croft, 2012; Sashi, 2012), enabling co-creation (Toppi et al., 2013) and involvement in innovation (Ylimaula & Ulkuniemi, 2013; Juhan Jussila, Kärkäinen & Leino, 2011). This is not a definitive list of the tasks that social media can be used for in a B2B context as very little research has been conducted in the area. Research into the use of social media in a B2B marketing context is necessary to identify the range of tasks that can be performed. The supplier could potentially be selective in opening the tasks up to certain customers; for example if the supplier wanted feedback on a new product they might establish an open group to key customers.

Figure 2: Factors Influencing the Choice and Use of Social Media.

![Diagram showing task type, relationship stage, presence of factors, and social media qualities](image)

Figure 2 draws the various elements discussed together. The precise nature of the interrelationships between the various elements needs to be examined further.

Theoretically, if both the suppliers and buyers are using an appropriate social medium for a specific task then satisfaction with the process and outcome will be high. There are mixed results for this proposition with regard to other media. Such (1999) looked at satisfaction for
a negotiation task performed via four different communication modes and found in terms of the process of negotiation the FtF group was more satisfied followed by the video, text and audio groups, which reinforces the task-media-fit theory. However, the media used did not affect the outcome satisfaction. However, Karan et al. (1996) found no difference in process satisfaction between the CMC groups and FtF groups. There was no decrease in satisfaction with the outcome when using CMC. Overall, however, the research suggests that FtF interaction produces more satisfaction with the outcome (Suh, 1999; Benbunan-Fich et al., 2003; Wilson, 2003). Satisfaction with the process and outcomes will contribute to the development of the long-term relationship.

**Research Objectives**

Primarily it is unclear how social media platforms are used for marketing content and dialogue to initiate and develop business-to-business relationships. To address this there are a number of broad issues highlighted below which need to be examined.

- How do the qualities of social media vary and how do these qualities affect their appropriateness for specific tasks?
- When appropriate social media are used to perform tasks are the companies more satisfied with the interaction?
- How effective are the various qualities of social media in reducing uncertainty, the various distances and types of risks?
- How do suppliers and buyers use social media at varying stages of a relationship?
- How do the variety of tasks performed by suppliers and buyers change as the relationship develops from stage to stage?

**Methodology**

This research will require a number of stages in order to fully answer the objectives. Initially research will need to be undertaken to gain a fuller understanding of how social media is being used by suppliers. This will require the use of netnography, a relatively new methodology. It is ‘participant-observational’ research based in online fieldwork. It uses computer mediated communications as a source of data to arrive at the “ethnographic understanding and representation of a cultural or communal phenomenon” (Kozinets, 2010, p.60). More specifically, observational netnography will be used to track online activities without actually interacting with respondents. The research will examine publicly available supplier created information across a variety of social media including websites (Facebook, LinkedIn, YouTube and Twitter) and evaluate the potential objectives of this information, e.g., raising brand awareness and the types of tasks performed. It will also examine buyers’ and other stakeholders’ interaction with the supplier provided content through measures such as Likes, shares, etc., and it will examine the content generated by customers and other stakeholders and evaluate their potential objectives. Content analysis will be performed on the social media data. This naturalistic and unobtrusive methodology will provide insights into suppliers’ and customers’ use of social media. Judgemental sampling will be used. Kozinet’s (2010) guidelines suggest selecting sample elements that are relevant, active (i.e. contain discussion sections), interactive (i.e. have a reasonably steady flow of communication), substantial, heterogeneous (i.e. have a sufficient number of members), and
data-rich sites (i.e. have detailed posts suitable for netnographic study). The Social Brands 100 list identifies the leaders in the field of using social media and will be used to identify any B2B companies who might be examined in the study. The Financial Times UK 500 2013 will be used to identify a variety of sector leaders. The social media channels that selected companies engage with will be identified and the content posted on the various channels will be analysed. A pilot study will be carried out which will entail data being collected for a two-week period. This will a) ensure the companies selected meet Kozinet’s (2010) guidelines for sampling and b) determine whether the data collected is appropriate. The pilot will then be followed with the main study which will entail data being collected for a 12-week period with the 30 companies’ social media channels being visited every day to record the content posted and the interactions and discussion stimulated by it. Field notes will be taken to record other observations. Being a relatively new methodology, there are a number of ethical considerations regarding informed consent, permission and confidentiality which will need careful consideration. The netnographic stage will be followed up with semi structured interviews of suppliers and buyers. The interviews will require the respondents to consider their use of social media relationships at different developmental stages and its appropriateness.

References
Fortune A. and Brodt S., (2000), Face to Face or Virtually for the Second Time Around: The Influence of Task, Past Experience and Media on Trust and Deception in Negotiation, (Working Paper), Duke University, Durham NC.


