Discussion Paper No. 112

INNOVATION DIFFUSION WITH THE SUPPLY CHAIN: THE CHINESE APPAREL FIRMS IN SHENZEN

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Abstract

Supply chain management directly affects corporate performance. Today's supply chain management is very different from what it was a decade ago; nowadays, developing and implementing a networked, flexible supply chain that integrates all partners—manufacturers, retailers, suppliers, carriers, and vendors—into a seamless unit is the crucial step in meeting ongoing customer demand and maintaining a competitive edge. However, effective supply chain integration can not be achieved unless the different components involved in the processes are coordinated.

As the traditional ways of growing business erode, companies will increasingly depend on innovations to build up competitive advantages and carry out a holistic, fully integrated approach to their supply chain designs. By doing so, the management sectors of supply chain integration can replace conventional, functional, silo-limited thinking with the pursuit of flexibility and effectiveness. This research addresses a gap in the literature between innovation diffusion and supply chain integration. This study examines how organisations expand their efforts on supply chain integration and how they can improve their innovation efforts during the integration process.

Companies that manufacture for designer labels and other apparel lines in Shenzhen, China were surveyed to examine the inter-relationship between their supply chain integration performance, their perception of the two governance mechanisms, and their innovation diffusion processes. The results showed that supply chain integration has a positive relationship with innovation diffusion and supply chain integration governance mechanisms do impact innovation diffusion processes.

Keywords: supply chain integration, innovation diffusion, supply chain governance mechanisms

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1. Introduction

There has been increased interest in supply chain management with innovation seen as the critical path in achieving competitive advantage over the past several years (Spekman, Spear, and Kamaiff, 2002; Van de Ven, 1986; Porter, 1985). A number of authors in the supply chain management area have argued for the necessity of creating new ways of doing business to survive in a highly competitive environment (Corso and Pavesi, 2000; Bolwijn and Kumpe, 1990) as traditional mechanisms for organisations' business growth erode (Capon and Glazer, 1987). New and innovative business designs must match business competitive environments. Some organisations have already explored this idea by focusing on innovation (Santos, Doz, and Williamson, 2004).

Previous researchers have combined supply chain integration and innovation together either by studying an organisation's integration as a source of innovation (Marshall, 2004; Teece, Pisano and Shuen, 1997), or by identifying the innovation generation process within the supply chain (Sivadas and Dwyer, 2000; Dodgson and Rothwell, 1994). However, the literature on a detailed analysis on the processes of innovation diffusion within the supply chain context is sparse.

An organisation could strengthen its competences through innovation (Danneels, 2002). Thus, the diffusion of innovation is believed to be a key factor to achieve an overall improvement of the entire supply chain (Teece, 1980). However, the trend of integrating organisations' supply chain activities has encouraged organisations to compete through their supply chains, rather than through individual organisational effects (Giannakis and Croom, 2004; Lummus and Vokurka, 1999; Lambert, Cooper, and Pagh, 1998). Therefore, there is a demand for organisations to extend their innovative efforts over a broader range, that offers greater value for supply chain competitiveness (Marshall, 2004).

This research addresses a gap in the literature between innovation diffusion and supply chain integration and examines how organisations expand their efforts on supply chain integration and how to improve their innovation efforts during the integration process. The rest of this paper is organized as follow. Section 2 provides

an overview of the relevant literature and addresses the research questions of this study. Section 3 describes the conceptual research model, research methodology, and the hypotheses. Section 4 discusses the empirical results. Section 5 offers a discussion and conclusions.

2. Literature Review

The term supply chain integration represents the synthesis of all processes and activities in the complete manufacturing and distribution cycle – this includes everything from product design, materials and component ordering, manufacturing and assembly, and warehousing and distribution, until the finished product reaches the end customers (Svensson, 2003; Morgan and Monczka, 2003; Croxton, Garcia-Dastugue, Lambert, and Rogers, 2001). This implies that conventional operational procedures are no longer suitable for the new business model. Supply chain organisations need to re-evaluate the totality of everything they do if they want to remain competitive (Fawcett and Magnan, 2001). New and innovative business designs have to be carried out to match the new business model (Porter and VanDerLinde, 1995).

Furthermore, since supply chain integration involves more than one organisation's benefits and endeavours, this new form of business operation deserves certain protection to prevent organisations' supply chain integration efforts from being subjected to numerous supply chain hazards (for example, the opportunistic behaviour) (Williamson, 1999). The two common behavioural supply chain theories, the resource based theory and the transaction cost theory, suggest that relational governance, and formal contract governance, can be two effective complementary mechanisms to achieve the supply chain governance purpose (Lummus *et al.*, 2003; Amit and Schoemaker, 1993; Williamson, 1999).

2.1 Resource Based Theory and the Relational Governance

Resource based theory emphasises value maximisation through the possession of a particular valuable resource (Barney, 2001). According to resource based theory, organisations' resources are not limited to only tangible assets, the enduring inter-firm relationships are also regarded as valuable intangible resources that generate long-

term values for organisations' supply chain management (Olavarrieta and Ellinger, 1997; Amit and Schoemaker, 1993).

Since no organisation can be described as completely self-sufficient regarding its resource possession along the supply chain (Ettlie and Sethuraman, 2002; Olavarrieta and Ellinger, 1997), members operating on the same supply chain should be considered as a collection of complementary resources and capabilities (Fawcett and Magnan, 2002; Skjoett-Larsen, 1999). Therefore, from the resource based view, developing relationships to accompany the mutual exchanges of complementary resources is a necessity (Lambert, *et al.*, 1998).

The inter-firm relationship that is derived from organisations' repeated exchange processes will continuously help to generate more benefits in the future (Cadilhon and Fearne, 2005). These benefits are deeply embedded in the norms nurtured by the resource based relationship. Trust, mutual business goals, and commitment are all examples of the promoted norms (Wilson, 1995). Organisations need to obey these norms so that they can meet each other's performance expectation, which represents quality collaboration (Skjoett-Larsen, 1999). Also, these norms can work as a benchmark for organisations to make mutual adjustment and bring the sense of fairness to their joint efforts, which improves organisations' operation flexibility by enhancing their problem solving capability (Poppo and Zenger, 2002; Lambert, *et al.*, 1998).

Resource based theory binds supply chain organisations together by highlighting the importance of the exchanges of complementary resources (Heide and John, 1992; Dwyer *et al.*, 1987). Through the repeated exchange processes, organisations solidify their inter-firm relationships, for which the developed cooperation norms are the core (Olavarrieta and Ellinger, 1997). The relationships in turn become a governance mechanism of organisations' supply chain integration in terms of their impacts on organisations' pursuit of the supply chain collaboration and operation flexibility (Barney, 2001).

2.2 Transaction Cost Theory and the Formal Contract Governance

Transaction cost theory is *a blend of institutional economics, organisational theory, and contract law* (Heide and John, 1988, p.20). Transaction cost theory distinguishes two types of transaction governance: market and hierarchies (Williamson, 1975). Market governance is efficient when transactions are simple and easy to manage (Williamson, 1999, 1975). In this case, the transactions do not require specialised asset investment. Even if non-compliance happens, it does not cost the involved parties too much to contract with alternative partners (Heide, 1994).

Unfortunately, the preceding scenario is not often the case in today's business world. Currently, the complexity of transactions increases as the involved parties are making more idiosyncratic investments that cannot be transplanted easily for other transactional purposes (Bensaou and Anderson, 1999; Klein *et al.*, 1990). In this situation, the owner firm of the idiosyncratic investments may want some particular protection; when the complicated unforeseeable outcomes are perceived by managers as significant contracting hazards, they would prefer hierarchies as the methods to vertically integrate their transactions (Mayer and Argyres, 2004; Poppo and Zenger, 2002; Williamson, 1975). The more a firm has invested in the specialised assets, the more a firm will attempt to evaluate the various future contingencies, which in turn lead to their preference on complex contracts to protect their idiosyncratic investments (Klein *et al.*, 1990).

It is necessary to note that *"transaction cost economics ascribes foresight rather than myopia to human actors"* (Williamson, 1999, p.1089). The theories *"do not presume that all players act in an opportunistic way, but the problem is that some players sometimes behave in an opportunistic way"* (Skjoett-Larsen, 1999, p.42). So what transaction cost theory does to encourage organisations to "*look ahead, perceive hazards, and factor these back into the contractual relation*" (Williamson, 1996: p.9). Opportunism still has its possibility to occur, therefore organisations' demands on formal contract governance can not be ideally omitted from the discussion (Williamson, 1993).

These perspectives from transaction cost theory suggest that organisations deserve governance for their transactional investments and formal contracts are often their final choices because they represent organisations' forethoughts for the future to a certain extent (Lummus *et al.*, 2003; Williamson 1999). Without the foresight, organisations will be too vulnerable to achieve flexibility and responsiveness (Tadelis, 2002).

2.3 The Complementarities Between the Two Governance Mechanisms

Dwyer *et al.* (1987) have emphasised the importance of a transactional/relational continuum to study channel partnership. The authors advocate that transactional exchanges are at one end of the continuum that are characterised by discrete buyer-seller exchanges of a product for money with no anticipation of future exchanges (Dwyer *et al.*, 1987). At the other end of the continuum are relational exchanges, which are amied at achieving the collective benefits of all partners' through mutual adjustment (Dwyer *et al.*, 1987).

This continuum implies that transactional and relational factors should not be regarded as discrete fractions. Rather, they are complement factors for safeguarding organisations supply chain integration (see Whinston, 2003; Tadelis, 2002)

The relational governance, on the one hand, has its own embedded shortcoming while safeguarding the supply chain integration – it does not stop organisations from acting opportunistically (Poppo and Zenger, 2002; Skjoett-Larsen, 1999). Even though it develops operation norms among organisations, the optimal operation for one organisation may be far away from optimal for another organisation (Mayer and Argyres, 2004). By adopting formal contracts, organisations can *"narrow the domain and severity of risks to which an exchange is exposed and thereby encourage cooperation and trust"* (Poppo and Zenger, 2002: p. 708). In these cases, the formal contracts play a complementary role for relational governance by clearly stating the can-do and can-not-do (Williamson, 1975).

On the other hand, however, the formal contract governance has its disadvantage as well; writing complex contracts is costly (Heide, 1994). Furthermore, formal contracts

may have a side-effect of discriminating the trust between parties as they are based on the guess of other parties' opportunistic behaviour in the future (Mayer and Argyres, 2004). Purely depending on the efficacy of the formal contracts will be a less-optimal choice; relational governance needs to be introduced as complementary (Poppo and Zenger, 2002; Dwyer *et al.*, 1987).

2.4 Gap in the Literature

Previous researchers have combined supply chain integration and innovation together either by studying an organisation's integration as a source of innovation (Marshall, 2004; Teece *et al.*, 1997), or by identifying the innovation generation process within the supply chain (Sivadas and Dwyer, 2000; Dodgson and Rothwell, 1994). However, an in-depth study on the processes of innovation diffusion within the supply chain context is not salient in the literature.

The innovation literature suggests that innovation can bring new business opportunities to organisations and lead to breakthrough new business models (Florida and Goodnight, 2005; Afuah, 2003). However, within the innovation diffusion environment (for example, the supply chain setting), there are always certain embedded situational or environmental factors that impact on the innovation diffusion processes (Rogers, 2003). Being aware of these factors and knowing how to use them to impact on the diffusion processes are the key issues addressed in this research. This research applies the features of the innovation diffusion processes into the supply chain setting and studies the inter-relationship between supply chain integration, innovation diffusion, and the two supply chain governance mechanisms.

3. Research Model and Hypotheses

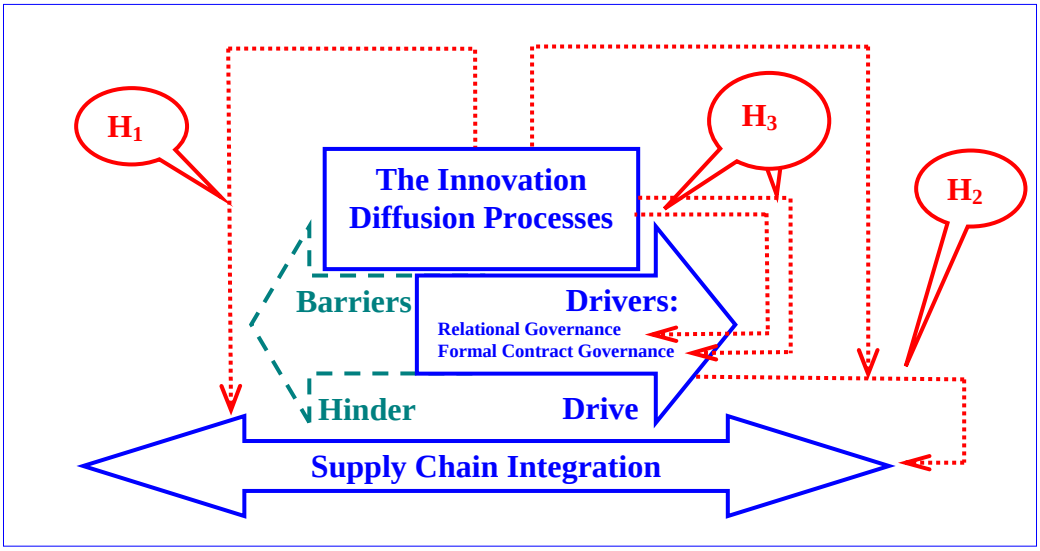
This research applies innovation diffusion processes into the supply chain setting and studies the different relationships emerged during this process. The preceding discussion has outlined the major variables that are concentrated on in this research. These variables are: supply chain integration, innovation diffusion, the relational governance, and the formal contract governance. The conceptual model of this research is illustrated in Figure 1. The research objectives include:

- ascertaining whether there is a certain type of relationship between innovation diffusion and an organisation's performance on supply chain integration.

- Identifying and examining the effectiveness of the two supply chain governance mechanisms within the innovation diffusion processes.

Figure 1

The Conceptual Research Model



Within this model, the two governance mechanisms that safeguard organisations supply chain efforts and drive the supply chain operation forward along the right track (Mayer and Argyres, 2004). They are studied as the drivers for the supply chain integration (Lummus *et al.*, 2003). Of course, varieties always exist in the real business world; there are still some barriers, which may hinder organisations' supply chain efforts (McCullen and Towill, 2002). However, only the two governance mechanisms are the focus of this study.

Four variables are included in the model: SCI (supply chain integration), ID (innovation diffusion), RE (the relational governance), and CON (the formal contract governance). The following research hypotheses are tested.

Hypothesis 1: The innovation diffusion processes within the supply chain context are related to supply chain integration.

$$Supply\ \ Chain\ \ Integration = f(ID)$$ ----------Model 1.

Hypothesis 2: The two supply chain governance mechanisms are related to the supply chain integration while innovation diffusion processes are taking place.

$$Supply\ \ Chain\ \ Integration = f(ID,\ \ RE,\ \ CON)$$ ----------Model 2.

Hypothesis 3: Supply chain governance mechanisms are related to the supply chain innovation diffusion processes.

$$Innovation\ \ Diffusion = f(RE,\ \ CON)$$ ----------Model 3.

4. Research Methodology and Empirical Results

Companies that manufacture for designer labels as well as other apparel lines in Shenzhen, China were surveyed to examine the inter-relationship between their supply chain integration performance, their perception of the two governance mechanisms, and their innovation diffusion processes. A personal administrated questionnaire was considered as the most appropriate data collection method for this research as it clarifies the questions immediately and helps provide a high response rate.

The apparel industry is becoming prominent as one of the most globalised industries in the world (Lord and McIntyre, 2003; Yen, 2002). On the supply side, the apparel industry *"is a supply driven commodity chain led by a combination of retailers, contractors, subcontractors, merchandisers, buyers, and suppliers; each plays an important role in a network of supply chains…"* (Yen, 2002: p.43). On the demand side, the apparel industry suffers great volatility; the material sourcing and the clothing design are always driven by fashion elements, which can be described as highly whimsical (Stratton and Warburton, 2003). This implies that within the supply network of the apparel industry, both the interconnection and collaboration between the supply chain members, and the innovative supply chain operation methods are especially critical (Thomassey, Happiette and Castelain, 2005). This provides a fertile ground for the study of innovation diffusion within the supply chain environment.

4.1 Questionnaire and Sample Size

In total, there are twenty-two construct measurements developed for the 4 research variables. Details of the construct measurement are presented in Table 1. A pilot study to pre-test the questionnaire was conducted on eighteen respondents. The pilot group was comprised of English-speaking and Chinese-speaking respondents at Lincoln University. The pilot study was conducted to ensure that the questions were understood by the respondents and that there were no problems with the wording of the questions in English and Chinese. The results of this pilot study indicated that three changes need to be made to the wording of the Chinese version of the questionnaire to make it more explicit. The rest of the questionnaire remained the same. No measurement or sequencing problems were identified.

This research obtained the index of Shenzhen apparel manufacturing companies from the statistical department of GuangDong State Council. There are 1527 clothing manufacturers located in Shenzhen. The 492 companies that were established by investors from Hong Kong, Macao, and Taiwan are the target of this research. The sample size was calculated on the basis of a 95% confidence level with a critical value equal of 1.96. This yielded 140 companies for the research.

4.2 Empirical Analysis

The data analysis consists of the followings: descriptive statistics of the respondents followed the reliability test, mean test, and regression analysis on the entire sample size. The second step involves the reliability test, mean test, and regression analysis on the respondents with greater than one year of supply chain experience followed by respondents with greater than two years of supply chain experience.

4.2.1 Descriptive Statistics of the Respondents

Table 1 shows the descriptive statistics of the respondents. The 148 respondents that were surveyed are directors of the marketing departments of their companies, where 43.2% have corporate-wide responsibilities, and 56.8% are in charge of business within their own marketing departments or divisions. The main education levels for the sample respondents were bachelor degree (44.3%) and diploma (31.8%).

In terms of the supply chain experience, 90.4% of the respondents have less than 4 years of supply chain working experience. The results show that most of the respondents have 1 to 2 years of supply chain working experience (36.4%). Almost all of the surveyed companies (99%) have maintained more than 2 years of supply chain relationships with their biggest suppliers (see Table 1).

Firm size was estimated by the number of full-time employees, where 47.3% of the surveyed companies have between 101 to 200 employees, and 46.6% have less than 100 employees. Approximately 62% of the companies have been in business for more than 4 years, and 40.4% have implemented the concept of supply chain management for 3 to 4 years. However, no more than 1.4% of the companies have implemented the supply chain concept for over 7 years (see Table 1).

4.2.2 Reliability Test of the Construct Measurements – Entire Sample

The reliability test of the construct measurements for the entire sample size are shown in Table 2. This research adopts a Cronbach's Alpha value of 0.60 as the cut-off point, which generally indicates satisfactory internal consistency reliability in exploratory research (Miller, 1995).

The results do not show a high reliability since the Cronbach's Alpha values are less than 0.60. However, the Cronbach's alpha value improves when responses from the less experienced respondents are removed from the sample. These results are consistent with the results of the regression analysis when respondents with less than one years experience are omitted from the sample.

4.2.3 Mean Test

Table 3 and 4 show the results the mean test between supply chain integration (SCI) and the demographic variables, and the mean test between innovation diffusion (ID) and the demographic variables. The results suggest that firm size is significant at the 5% level for both tests, and supply chain experience is only significant at the 10% level only for the mean test between supply chain integration and demographic variables. However, the test results require two decisions; firstly, because firm size is significant at the 5% level in both categories, it is included in the regression analysis as a dummy variable; secondly, because supply chain experience is only significant at

the 10% level, it is not used as a dummy variable but as a benchmark to divide the dataset.

4.2.4 Regression Analysis

The dummy variable for firm size is included in all the 3 models and is determined as follows:

- Firm size group one → Firm_Samll; 1 if the firm has less than 100 full-time employees, 0 otherwise
- Firm size group two → Firm_Medium; 1 if the firm has 101-200 full-time employees, 0 otherwise
- Firm size group three → Firm_Large; 1 if the firm has 201-300 full time employees, 0 otherwise

The results for the regression analysis of the three empirical models are shown in Table 5. Model 1 is the regression analysis between supply chain integration (dependent variable) and innovation diffusion (independent variable) (see Table 5). The results show that innovation diffusion is significant at the 5% level. The coefficient of the dummy variable of Firm_Large is also significant at the 5% level.

Model 2 is the regression analysis between supply chain integration (dependent variable) and three independent variables – innovation diffusion, relationship, and contract. The three independent variables are all significant at the 5% level. The coefficient of the dummy variable of Firm_Large is also significant at the 5% level.

Model 3 is the regression analysis between innovation diffusion (dependent variable) and two independent variables –relationship and contract. The results show that only contract is significant at the 5% level, both the relationship and the dummy variables are not significant in this model.

The findings from the above three models support the research hypotheses, but they are statistically biased since the reliability scores are less than the Cronbach's Alpha cut-off values (see Table 2). Low reliability values were found on supply chain integration and innovation diffusion. Therefore, a further analysis of the data and the

statistical methodology needs to be conducted to improve the reliability values and the overall results.

4.3 Statistical Tests on Respondents with Greater than One Year of Supply Chain Experience

4.3.1 Reliability Test of the Construct Measurements

The supply chain literature also suggests that experiences can help firms to improve performance, understand the market and suppliers, and help management people to make better decisions while choosing supply chain partners (Rae-Smith, 2002; Handfield et al., 2000). This research uses supply chain experience as a control factor to divide the entire sample size into two groups: the less-experienced respondents (with less than 1 year of supply chain experiences), and the more experienced respondents (with greater than 1 year of supply chain experiences). The regression model discards the respondents that have indicated their companies have less than one year of supply chain experience. Results of the new reliability test are shown in Table 6. The results clearly show that reliability has improved greatly after discarding the less-experienced respondents. The Cronbach's Alpha values of the research variables are: 0.575 (supply chain integration), 0.602 (innovation diffusion), 0.608 (relationship governance), and 0.607 (formal contract governance) (see Table 6).

4.3.2 Mean Tests

T-test and One-way ANOVA test are used to test the difference of mean between SCI, ID, and the demographic variables. The results are shown in Tables 7 and 8.
Table 7 shows the result of the mean test between SCI and the demographic variables. The results show firm size is significance at the 5% level while firm age is significant at the 10% level. Firm size will be included as a dummy variable in the regression analysis. Table 8 shows the result of the mean test between ID and the demographic variables. The results suggest that there is no significant variable found within the test. Therefore, for the regression analysis for ID, no dummy variable test is conducted.

4.3.3 Regression Analysis

The results in Model 1 support the hypothesised relationship between SCI and ID is supported. Moreover, one dummy variable (Firm_Large) is also significant in this

model (see Table 9). Model 2 suggest that when the two governance mechanisms (relationship governance and formal contract governance) of the SCI are included into the model, the relationship between SCI and ID is not significant. However, the two governance mechanisms are significant within this model. All the included dummy variables are not significant in this model. Model 3 show that the hypothesised relationship between ID and contract is supported. However, the hypothesised relationship between ID and relationship is not significant.

However, some of the construct items are removed from the dataset in order to obtain a higher reliability. It is reasonable to state that even though the reliability has improved, the removed items may contain important information for the study. In order to keep as many construct items as possible, and at the same time achieve a higher reliability level, this research goes a step further to conduct tests on the respondents with greater than 2 years of supply chain experience.

4.4 Statistical Tests on Respondents with Greater than Two Years of Supply Chain Experience

4.4.1 Reliability Test

This section discusses the test statistic results on respondents with greater than 2 years of supply chain experiences. Table 10 shows a Cronbach's Alpha value of at least 0.60 without deleting any of the construct items. This implies that when the respondents' supply chain experience increase, the test results are more reliable.

4.4.2 Mean Test

Table 11 shows the mean test between SCI and all the demographic variables. The results show that both firm size and concept age are significant at the 5% level for SCI. These two variables were included as dummy variables for testing their relationship with SCI. Table 12 shows the results of the mean test between ID and all the demographic variables. No significant demographic variable can be identified from the results.

4.4.3 Regression Analysis

The regression analysis is based on the respondents with more than 2 years of supply chain experience. Three models are shown in Table 13. The dummy variable (Responsibility) is determined as follows:

> Concept Age Less than 2 Years → Concept_12: 1 if the respondent's firm has implemented the concept of supply chain management for less than 2 years, 0 otherwise
>
> Concept Age Between 3-4 Years → Concept_34: 1 if the respondent's firm has implemented the concept of supply chain management for 3 to 4 years, 0 otherwise
>
> Concept Age Greater than 4 Years → Concept_4+: 1 if the respondent's firm has implemented the concept of supply chain management for more than 4 years, 0 otherwise.

The results in Model 1 support the hypothesised relationship between SCI and ID. Firm_Large is the only significant dummy variable. These results are similar to the results shown in Table 5. Model 2 showsthat when relationship and contract are included into the analysis, the hypothesised relationship between SCI and ID is not significant. Again, these results are similar to the findings in Table 5. However, no significant dummy variables were found in this model. Model 3 shows that only the hypothesised relationship between ID and relationship governance is supported. The findings differ from Table 5, which shows the hypothesised relationship between ID and the formal contract governance to be significant.

5. Discussions and Conclusions

The findings of this study imply that innovation diffusion and supply findings of in the chain integration are positively related. These findings are consistent with those in the previous literature. According to the previous studies, innovation diffusion improves the performance of the corporations that join the diffusion processes by strengthening their abilities to make new things happen.

The findings also suggest that the positive relationship between supply chain integration and innovation diffusion does not vary with the respondents' supply chain experience. This important point has not been articulated by previous researches. The result implies that as long as the supply chain firms are willing to take part in the innovation diffusion processes, they can benefit from the processes despite the length of their supply chain experiences. This finding is especially valuable for young firms that have recently started operating on the supply chain, and that are still hesitating to invest in their own innovation diffusion processes.

According to the results of the regression analyses, when the sample size is controlled by removing the less-experienced respondents (respondents with less than 1 year of supply chain experiences), only the relationship between supply chain integration and its two governance mechanisms (the relationship governance, and the formal contract governance) is significant. In other words, for the more-experienced respondents, the two supply chain governance mechanisms have more explanatory power on supply chain integration than innovation diffusion.

The above findings are explained as follows: Firstly, the previous discussion about innovation further suggested that innovation behaviour in origination has been attributed to dissimilar situational factors such as institutional arrangement, entrepreneurial behaviours, and organisational learning (Montalvo, 2004). Once an organisation has maintained a certain degree of innovativeness, or has already initiated an innovation, further efforts can be refined on the situational factors to keep the sustainability of innovation going (Garcia and Calantone, 2001). The situational factors are important, especially when organisations desire to spread their innovation efforts and accelerate the innovation diffusion within the supply chain setting. They can then implement changes and derive new generations of innovations (Montalvo, 2004; Rogers, 2003).

Therefore, when the relationship between supply chain integration and innovation diffusion is found to be insignificant with the inclusion of the two governance mechanisms, it does not necessarily mean that innovation diffusion is no longer important. The relationship between these two variables was statistically verified by the results for Hypothesis 1. The hidden rational for the lost relationship could be that

after the firms have stayed in the business for some time and gained some supply chain experiences, they may have implemented their first generation of innovation but currently shift their efforts to sustain their innovation endeavours by focusing on the important situational factors – the two governance mechanisms identified in this research.

Secondly, the previous discussion of the literature also suggested that innovation diffusion can be expensive and risky (Afuah, 2003). Innovation adopters are active decision-makers rather than passive units (Windsor, 1995). Therefore, when companies have stayed in the business long enough to nurture their stabilised supply chain relationship and formulate reliable contracts with their partners, they may not choose to take more risks on costly innovations to achieve their supply chain integration. As a result, supply chain integration does not seem to relate to innovation diffusion for the experienced companies (respondents with greater than 1 year of supply chain experiences).

The findings also demonstrated that when companies are young and inexperienced, they are still in the exploring stage of supply chain operation. These companies have at least two features of their supply chain operation: first, due to their inadequate experience, they probably have not developed enough reliable supply chain relationships with their partners. And secondly, their awareness of the potential hazards overrides their awareness of the importance of the supply chain relationship. Hence, they only count on the efficacy of the formal contract governance to govern the innovation diffusion processes.

However when the firms' supply chain experiences are improved and stabilised, at least two benefits of supply chain relationship emerge: on the one hand, firms find that their relationship with partners is less-expensive to maintain when compared to writing up formal contracts, which are usually associated with numerous legal works (Williamson, 1975). On the other hand, when it comes to the inter-firm process like innovation diffusion (which is more associated with an active, decision-making, relationship) it is probably more suitable to deal with conflicts generated by the different thoughts of management (Dwyer *et al.*, 1987).

The results of this study suggest that the more supply chain experience a firm has acquired, the more likely its focus will be on relational governance. In other words, after firms have stayed in the business long enough and developed reliable supply chain relationships, they prefer to use supply chain relationship to govern the innovation diffusion processes rather than the formal contract governance.

6. Limitations and Future Research

This study has important limitations in terms of generalising its findings. First, due to the unstable market demand that is driven by whimsical fashion trends, apparel manufacturers may perceive higher risks than manufacturers in other industries. This may lead to their favouring legal binding contracts that are believed by the contractors to have the effect of narrowing the domain and severity of risks. However, this may not be the case for other industries in other sectors. For example, the notion of the formal contract governance may not be able to be generalised to those industries that have comparatively stable demand and high-volume production. Future research may consider applying the proposed research model to the different industries to achieve a broader understanding of the relationships analysed in this study.

Second, the economic and institutional environment in which this study was conducted is still evolving. China's economic development has been remarkable during the past decade. This may give rise to firms' preference for formal contracts as inter-firm trust can only emerge with successful cooperation and the growth of profits. These growth prospects need some time to take place. In addition, the concept of supply chain management is new in China, and it has not been studied in-depth when compared to the Western countries. The limitation of the understanding on this particular issue may lead to biased answers to research questions regarding supply chain management. Future research may be able to overcome this limitation by surveying companies that have longer supply chain experiences in order to obtain more reliable responses.

Third, both supply chain integration and innovation diffusion are time-consuming processes. The dynamics embedded within the processes has not been completely analysed by this cross-sectional study. However, in order to fully understand the

dynamics, future research may consider changing the research time horizon and obtaining longitudinal data.

Fourth, this research emphasises the innovation diffusion processes rather than any particular type of innovation. As a result, the study does not distinguish the different diffusion processes according to the different innovation taxonomies. In fact, the innovation diffusion processes do vary depending on what type of innovation is to be diffused. Certainly, a more detailed and clearly categorised innovation typology should improve model specification, and the reliability and validity of an empirical study. Therefore, future research may be enhanced by removing this inability to distinguish the innovation types.

Finally, as this study was conducted in China, the language bias and the cultural factors that may arise naturally are additional limitations. Future research should be conducted in different cultures so that the findings can be more suitably generalised and cross-cultural comparisons can be made.

In summary, this research has empirically explored the relationships between the supply chain integration, innovation diffusion, and the supply chain governance mechanisms. The arguments and the empirical findings fill a gap in the literature by articulating the relationships between the research constructs. Further work is clearly required to apply the identified research model developed in this study to different research environments. In particular, there is a need to classify the types of innovation diffusion processes and further observe the interrelationship between the typology and its diffusion performance within the supply chain setting.

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Table 1

Descriptive Statistics of Respondents

Factors	Scale	Freq	%	Regroup the Scales	Freq	%
Sex	Male	109	73.6	Male	109	73.6
	Female	39	26.4	Female	39	26.4
Age	<25	40	27.0	<25	40	27.0
	25-35	63	42.6	25-35	63	42.6
	36-45	38	25.7	36+	45	30.4
	46-55	5	3.4			
	56-65	2	1.4			
Responsibility	Corp_Wide	64	43.2	Corp_Wide	64	43.2
	Div_Wide	84	56.8	Div_Wide	84	56.8
Education	High_School	3	2.0	Diploma and Lower	50	33.8
	Diploma	47	31.8	Bachelor	67	45.3
	Bachelor	67	45.3	Postgrad	31	20.9
	Postgrad	31	20.9			
SC_Experience	<1 year	28	18.9	<1	28	18.9
	1-2 years	54	36.5	1-2 years	54	36.5
	3-4 years	52	35.1	3+	66	44.6
	5-6 years	9	6.1			
	7-8 years	2	1.4			
	9+	3	2.0			
Length_Relationship	<1 year	1	0.7	<2 years	42	28.4
	1-2 years	41	27.7	3-4 years	64	43.2
	3-4 years	64	43.2	5+	42	28.4
	5-6 years	33	22.3			
	7-8 years	6	4.1			
	9+	3	2.0			
Firm_Size (numbers of employees)	<100	69	46.6	<100	69	46.6
	100-200	70	47.3	100-200	70	47.3
	201-300	9	6.1	301-300	9	6.1
Firm_Age	<1 year	5	3.4	<2 years	10	6.8
	1-2 years	5	3.4	3-4 years	46	31.1
	3-4 years	46	31.1	5+	92	62.2
	5-6 years	51	34.5			
	7-8 years	33	22.3			
	9+	8	5.4			
Concept_Age	<1 year	12	8.1	<2 years	59	39.9
	1-2 years	47	31.8	3-4 years	60	40.5
	3-4 years	60	40.5	5+	29	19.6
	5-6 years	27	18.2			
	7-8 years	1	0.7			
	9+	1	0.7			

Table 2

Reliability Test for the Construct Measurements (the Entire Sample Size)

Factors	Construct Measures	Cronbach's Alpha Value
Supply Chain Integration	Q10. Your company and the other supply chain partners have a collective vision.	0.481
	Q11. Your company conducts cross-functional teams within the firm.	
	Q12. Your company understands your supply chain partners' competencies clearly.	
	Q13. Your company teams with suppliers.	
	Q14. Your company teams with customers.	
	Q15. The supply chain manager maintains performance measurement.	
	Q16. Your company's supply chain undertakes regular performance re-evaluation.	
Innovation Diffusion	Q17. Your company invests aggressively in supply chain innovations.	0.456
	Q18. Your company communicates with partners about the usefulness of innovations.	
	Q19. Your company recognises the importance of learning.	
	Q20. Your company communicates with partners about the existing problems.	
	Q21. Your company communicates with partners about innovative solutions for existing problems.	
Supply Chain Relationship	Q22. You trust your supply chain partners.	0.512
	Q23. You commit to your supply chain relationship.	
	Q24. You cooperate with your supply chain partners.	
	Q25. You share mutual goals with your supply chain partners.	
	Q26. You are satisfied with your supply chain partners' performance.	
The Governance of Formal Contract	Q27. Geographical proximity requires the governance of formal contracts.	0.542
	Q28. Assets specificity requires the governance of formal contracts.	
	Q29. Human factor specificity requires the governance of formal contracts.	
	Q30. Your company's contracts are legally binding.	
	Q31. Demand uncertainties are major reasons for your company to write formal contracts.	

Note: This research adopts a 0.60 Cronbach's Alpha value as the cut-off point.

Table 3

Mean Test Between Supply Chain Integration and Demographic Variables (for Entire Sample)

Demographic Factors	Groups of Answers	Mean	Test Statistics	Sig.
Sex	Male	3.8375	t = -0.275	0.783
	Female	3.8608		
Age	<25	3.7179	F = 2.292	0.105
	25-35	3.9093		
	36+	3.8635		
Responsibility	Corporate_Wide	3.8170	t = -0.624	0.533
	Division_Wide	3.8639		
Education	Diploma and Less	3.7486	F = 2.069	0.130
	Bachelor	3.9190		
	Postgraduate	3.8341		
SC_Experience	<1	3.7245	F = 2.507	0.085*
	1-2	3.7989		
	3+	3.9307		
Length of Relationship	<2	3.7789	F = 1.069	0.346
	3-4	3.8348		
	5+	3.9218		
Firm Size	<100	3.8095	F = 8.870	0.000**
	101-200	3.8020		
	201-300	4.4286		
Firm Age	<2	4.0143	F = 1.513	0.224
	3-4	3.8975		
	5+	3.7981		
Concept Age	<2	3.7676	F = 1.804	0.168
	3-4	3.9238		
	5+	3.8325		

** Significant at 5%
* Significant at 10%

Table 4

Mean Test Between Innovation Diffusion and Demographic Variables (for Entire Sample)

Demographic Factors	Groups of Answers	Mean	Test Statistics	Sig.
Sex	Male	3.8119	t = - 0.488	0. 626
	Female	3.8654		
Age	<25	3.7938	F = 0.293	0.746
	25-35	3.8690		
	36+	3.7944		
Responsibility	Corporate_Wide	3.8086	t = - 0.315	0.753
	Division_Wide	3.8393		
Education	Diploma and Less	3.7550	F = 0.833	0.437
	Bachelor	3.8321		
	Postgraduate	3.9274		
SC_Experience	<1	3.6786	F = 1.698	0.187
	1-2	3.7963		
	3+	3.9129		
Length of Relationship	<2	3.8214	F = 0.612	0.543
	3-4	3.8789		
	5+	3.7500		
Firm Size	<100	3.8261	F = 3.107	0.048**
	101-200	3.7679		
	201-300	4.2778		
Firm Age	<2	3.7500	F = 0.669	0.514
	3-4	3.7554		
	5+	3.8696		
Concept Age	<2	3.7458	F = 1.089	0.339
	3-4	3.9042		
	5+	3.8276		

** Significant at 5%
* Significant at 10%

Table 5

Regression Analysis Results (for Entire Sample)

Model 1.	Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B	
	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
(Constant)	2.954	0.228		12.946	0.000**	2.503	3.405
Innovation Diffusion	0.225	0.059	0.291	3.806	0.000**	0.108	0.342
Firm_Small	-0.006	0.070	-0.006	-0.080	0.936	-0.144	0.132
Firm_Large	0.512	0.149	0.271	3.440	0.001**	0.218	0.806
			R square: 0.190				F: 11.293

Dependent Variable: Supply Chian Integration

Model 2.	Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B	
	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
(Constant)	2.019	0.255		7.930	0.000**	1.516	2.523
Innovation Diffusion	0.117	0.056	0.151	2.097	0.038**	0.007	0.227
Relationship	0.131	0.047	0.205	2.777	0.006**	0.038	0.225
Contract	0.223	0.050	0.334	4.433	0.000**	0.124	0.323
Firm_Small	0.013	0.062	0.015	0.214	0.831	-0.110	0.137
Firm_Large	0.357	0.135	0.189	2.640	0.009**	0.090	0.624
			R square: 0.364				F: 16.246

Dependent Variable: Supply Chain Integration

Model 3.	Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B	
	B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
(Constant)	2.557	0.318		8.048	0.000**	1.929	3.185
Relationship	0.107	0.071	0.128	1.513	0.133	-0.033	0.246
Contract	0.213	0.074	0.246	2.889	0.004**	0.067	0.358
Firm_Small	0.070	0.094	0.059	0.741	0.460	-0.116	0.255
Firm_Large	0.320	0.201	0.131	1.589	0.114	-0.078	0.718
			R square: 0.136				F: 5.611

Dependent Variable: Innovation Diffusion

** Significant at 5%
* Significant at 10%

Table 6

Reliability Test of the Construct Measurements
(Respondents with Greater than 1 Year of Supply Chain Experience)

Factors	Construct Measures	Cronbach's α 1/	Cronbach's α 2/
Supply Chain Integration	Q10. Your company and the other supply chain partners have a collective vision.		
	Q11. Your company conducts cross-functional teams within the firm.		
	Q12. Your company understands your supply chain partners' competencies clearly.		
	Q13. Your company teams with suppliers.		
	Q14. Your company teams with customers.		
	Q15. The supply chain manager maintains performance measurement.		0.575 (Q11 and Q15 are out)
	Q16. Your company's supply chain undertakes regular performance re-evaluation.	0.561	
Innovation Diffusion	Q17. Your company invests aggressively in supply chain innovations.		
	Q18. Your company communicates with partners about the usefulness of innovations.		
	Q19. Your company recognises the importance of learning.		0.602 (Q17, Q19, and Q18 are out)
	Q20. Your company communicates with partners about the existing problems.		
	Q21. Your company communicates with partners about innovative solutions for existing problems.	0.510	
Supply Chain Relationship	Q22. You trust your supply chain partners.		
	Q23. You commit to your supply chain relationship.		
	Q24. You cooperate with your supply chain partners.		0.608 (Nothing out, the result remains)
	Q25. You share mutual goals with your supply chain partners.		
	Q26. You are satisfied with your supply chain partners' performance.	0.608	
The Governance of Formal Contract	Q27. Geographical proximity requires the governance of formal contracts.		
	Q28. Assets specificity requires the governance of formal contracts.		
	Q29. Human factor specificity requires the governance of formal contracts.		
	Q30. Your company's contracts are legally binding.		0.607 (Q31 is out)
	Q31. Demand uncertainties are major reasons for your company to write formal contracts.	0.584	

1/ The cronbach's Alpha values of the1st round of reliability test with every measurement in place.
2/ The cronbach's Alpha values of reliability test after taking some construct measures out (the shaded construct measures).
Note: This research adopts a 0.60 Cronbach's Alpha value as the cut-off point.

Table 7

Test Between Supply Chain Integration and Demographic Variables (Respondents with Greater than 1 Year of Supply Chain Experience)

Demographic Factors	Groups of Answers	Mean	Test Statistics	Sig.
Sex	Male	3.8584		
	Female	3.8452	t = 0.114	0.910
Age	<25	3.7111		
	25-35	3.9704		
	36+	3.7949	F = 2.335	0.101
Responsibility	Corporate_Wide	3.8078		
	Division_Wide	3.8899	t = -0.796	0.428
Education	Diploma and Less	3.8048		
	Bachelor	3.9418		
	Postgraduate	3.7391	F = 1.343	0.265
SC_Experience	1-2	3.8111		
	3+	3.8909	F = 0.607	0.437
Length of Relationship	<2	3.7742		
	3-4	3.8545		
	5+	3.9294	F = 0.625	0.537
Firm Size	<100	3.7782		
	101-200	3.8393		
	201-300	4.4222	F = 5.610	0.005**
Firm Age	<2	4.2286		
	3-4	3.9250		
	5+	3.7808	F = 2.603	0.078*
Concept Age	<2	3.7617		
	3-4	3.9833		
	5+	3.7840	F = 2.177	0.118

** Significant at 5%
* Significant at 10%

Table 8

Revised Mean Test Between Innovation Diffusion and Demographic Variables (Respondents with Greater than 1 Year of Supply Chain Experience)

Demographic Factors	Groups of Answers	Mean	Test Statistics	Sig.
Sex	Male	3.8584		
	Female	3.8452	t = 0.114	0. 910
Age	<25	3.8519		
	25-35	3.9444		
	36+	3.7564	F = 0.587	0.558
Responsibility	Corporate_Wide	3.8078		
	Division_Wide	3.8899	t = - 0.796	0.428
Education	Diploma and Less	3.7500		
	Bachelor	3.8455		
	Postgraduate	4.1087	F = 1.437	0.242
SC_Experience	1-2	3.8519		
	3+	3.8712	F = 0.016	0.899
Length of Relationship	<2	3.8548		
	3-4	4.0000		
	5+	3.6471	F = 1.956	0.146
Firm Size	<100	3.8273		
	101-200	3.8393		
	201-300	4.2222	F = 0.927	0.399
Firm Age	<2	3.7143		
	3-4	3.7125		
	5+	3.9589	F = 1.279	0.282
Concept Age	<2	3.7447		
	3-4	3.9896		
	5+	3.8400	F = 1.059	0.350

Table 9

Regression Analysis Results
(Respondents with Greater than 1 Year of Supply Chain Experience)

Model 1.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.295	0.237		13.906	0.000**	2.826	3.764
Innovation Diffusion	0.142	0.059	0.210	2.406	0.018**	0.025	0.259
Firm_Small	-0.059	0.100	-0.053	-0.595	0.553	-0.257	0.138
Firm_Large	0.529	0.190	0.251	2.778	0.006**	0.152	0.906
			R square: 0.131				F: 5.822

Dependent Variable: Supply Chain Integration

Model 2.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.157	0.357		3.243	0.002**	0.450	1.864
Innovation Diffusion	0.021	0.052	0.032	0.410	0.682	-0.082	0.125
Relationship	0.415	0.090	0.405	4.613	0.000**	0.237	0.594
Contract	0.249	0.086	0.252	2.903	0.004**	0.079	0.420
Firm_Small	0.031	0.085	0.027	0.360	0.719	-0.137	0.198
Firm_Large	0.300	0.162	0.143	1.853	0.066	-0.021	0.621
			R square: 0.404				F: 15.477

Dependent Variable: Supply Chain Integration

Model 3.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.555	0.583		2.668	0.009**	0.400	2.709
Relationship	0.238	0.154	0.157	1.547	0.125	-0.067	0.543
Contract	0.350	0.148	0.239	2.358	0.020**	0.056	0.644
			R square: 0.121				F: 8.044

Dependent Variable: Innovation Diffusion

** Significant at 5%

* Significant at 10%

Table 10

Reliability Test of the Construct Measurements
(Respondents with Greater than 2 Year of Supply Chain Experience)

Factors	Construct Measures	Cronbach's α 1/
Supply Chain Integration	Q10. Your company and the other supply chain partners have a collective vision. Q11. Your company conducts cross-functional teams within the firm. Q12. Your company understands your supply chain partners' competencies clearly. Q13. Your company teams with suppliers. Q14. Your company teams with customers. Q15. The supply chain manager maintains performance measurement. Q16. Your company's supply chain undertakes regular performance re-evaluation.	0.675
Innovation Diffusion	Q17. Your company invests aggressively in supply chain innovations. Q18. Your company communicates with partners about the usefulness of innovations. Q19. Your company recognises the importance of learning. Q20. Your company communicates with partners about the existing problems. Q21. Your company communicates with partners about innovative solutions for existing problems.	0.601
Supply Chain Relationship	Q22. You trust your supply chain partners. Q23. You commit to your supply chain relationship. Q24. You cooperate with your supply chain partners. Q25. You share mutual goals with your supply chain partners. Q26. You are satisfied with your supply chain partners' performance.	0.662
The Governance of Formal Contract	Q27. Geographical proximity requires the governance of formal contracts. Q28. Assets specificity requires the governance of formal contracts. Q29. Human factor specificity requires the governance of formal contracts. Q30. Your company's contracts are legally binding. Q31. Demand uncertainties are major reasons for your company to write formal contracts.	0.616

Note: This research adopts a 0.60 Cronbach's Alpha value as the cut-off point.

Table 11

Mean Test Between Supply Chain Integration and Demographic Variables (Respondents with Greater than 2 Years of Supply Chain Experience)

Demographic Factors	Groups of Answers	Mean	Test Statistics	Sig.
Sex	Male	3.9359		
	Female	3.9160	t = 0.142	0.888
Age	<25	3.6964		
	25-35	4.0640		
	36+	3.8621	F = 2.317	0.107
Responsibility	Corporate_Wide	3.8367		
	Division_Wide	4.0000	t = -1.332	0.188
Education	Diploma and Less	3.8506		
	Bachelor	4.0582		
	Postgraduate	3.8319	F = 1.547	0.221
Length of Relationship	<2	3.8132		
	3-4	3.9409		
	5+	3.9821	F = 0.494	0.612
Firm Size	<100	3.7653		
	101-200	3.9429		
	201-300	4.4643	F = 7.454	0.001**
Firm Age	<2	4.2857		
	3-4	3.9881		
	5+	3.8681	F = 1.254	0.292
Concept Age	<2	3.7075		
	3-4	4.0922		
	5+	3.9082	F = 4.169	0.020**

** Significant at 5%

Table 12

Mean Test Between Innovation Diffusion and Demographic Variables (Respondents with Greater than 2 Years of Supply Chain Experience)

Demographic Factors	Groups of Answers	Mean	Test Statistics	Sig.
Sex	Male	3.8408		
	Female	3.8941	t = -0.344	0. 732
Age	<25	3.5750		
	25-35	3.9103		
	36+	3.8759	F = 1.229	0.299
Responsibility	Corporate_Wide	3.8786		
	Division_Wide	3.8368	t = 0.305	0.762
Education	Diploma and Less	3.9091		
	Bachelor	3.8667		
	Postgraduate	3.7647	F = 0.339	0.714
Length of Relationship	<2	3.9231		
	3-4	3.9655		
	5+	3.6833	F = 1.933	0.153
Firm Size	<100	3.7214		
	101-200	3.9067		
	201-300	4.1250	F = 2.008	0.143
Firm Age	<2	4.0667		
	3-4	3.9250		
	5+	3.7949	F = 0.651	0.525
Concept Age	<2	3.8286		
	3-4	3.9097		
	5+	3.7714	F = 0.337	0.716

Table 13
Regression Analysis Results
(Respondents with Greater than 2 Years of Supply Chain Experience)

Model 1.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.103	0.407		7.619	0.000**	2.288	3.917
Innovation Diffusion	0.246	0.100	0.271	2.456	0.017**	0.046	0.446
Firm_Small	-0.136	0.114	-0.137	-1.199	0.235	-0.364	0.091
Firm_Large	0.358	0.179	0.238	2.000	0.050**	0.000	0.717
Concept 12	-0.272	0.126	-0.258	-2.147	0.036	-0.525	-0.019
Concept 5+	-0.089	0.140	-0.074	-0.635	0.528	-0.369	0.191
			R square: 0.315				F:5.513

Dependent Variable: Supply Chain Integration

Model 2.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.068	0.461		2.313	0.024**	0.144	1.991
Innovation Diffusion	0.037	0.084	0.041	0.444	0.659	-0.131	0.206
Relationship	0.464	0.096	0.520	4.827	0.000**	0.271	0.656
Contract	0.222	0.097	0.222	2.275	0.027**	0.027	0.417
Firm_Small	0.101	0.096	0.101	1.055	0.296	-0.090	0.292
Firm_Large	0.328	0.139	0.218	2.358	0.022**	0.050	0.606
Concept 12	-0.201	0.099	-0.191	-2.035	0.046	-0.399	-0.003
Concept 5+	-0.071	0.109	-0.059	-0.654	0.516	-0.289	0.147
			R square: 0.602				F:12.543

Dependent Variable: Supply Chain Integration

Model 3.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	1.821	0.561		3.243	0.002**	0.699	2.942
Relationship	0.318	0.129	0.322	2.463	0.017**	0.060	0.575
Contract	0.194	0.144	0.175	1.340	0.185	-0.095	0.482
			R square: 0.191				F: 7.444

** Significant at 5%
* Significant at 10%