Building up Trust in Different Culture Contexts: Case Studies from the Animation Game Industry

Zheng Liu

Xi'an Jiaotong-Liverpool University, China

This paper aims to explore the stages and processes of building up inter-firm trust in different national culture contexts. This is because the manufacturing system has increasing extents increasingly toward internationally network and inter-firm collaboration. Trust and commitment become important in inter-firm relationship. The way of building up trust varies from companies to companies, since it is impacted greatly by cultures and values. To investigate the details of trust, case studies, which used in animation game industry—an emerging industry based on project management and collaboration, were chosen. The research addresses activities in three stages—trust formation, trust development, and trust continuation. Characteristics and functionality of four types of trust—“competence, reliability, goodwill and loyalty” are demonstrated from practice perspective through case studies, which is further linked with culture dimensions with a framework model. The paper also raises some new research questions and themes for further research.

Keywords: trust, national culture, inter-firm relationship

Introduction

The manufacturing system today has expanded from traditional factory based operations towards increasingly more inter-firm collaboration (Shi & Gregory, 1998). Companies from different countries are involved in international and global business. Understanding national cultures is becoming important, because different norms and values can result in different patterns of production management, and way of collaboration (Skinner, 1964). Trust is one of key issues that vary under different culture meanings. When companies build up collaborative relationship with partners, the important issues of coordination, communication, information sharing and control are close connected with trust. This phenomenon happens not only in manufacturing sectors, but also in new industry, such as animation game studios, where in-house production is replaced by inter-firm collaboration with up-stream and down-stream partners. Generally, there are three types of business models in animation game industry, in-house production, collaborative/co-production, and outsourced models. In-house model used to be predominant 20 years ago, when large companies such as Disney integrate all resources along the supply chain, and produce movies according to their own R&Ds (Research & Development). However, with the development of 2-dimensional, 3-dimensional computer graphing technology, and internet operation skills, small studios grew up with competitively low cost and specialized techniques. Outsourcing became a new strategy for large companies to preserve core competence such as R&D, cutting off production lines. In recent

Zheng Liu, Dr./Lecturer, Xi'an Jiaotong-Liverpool University, China

Correspondence concerning this article should be addressed to BB250, International Business School Suzhou, Xi'an Jiaotong-Liverpool University, No.111 Ren'ai Road, Suzhou, Jiangsu Province, P.R.China. E-mail: Zheng.liu01@xjtlu.edu.cn.

years, the way of collaboration in R&D, character business and game operation emerged as more value-added models for participating companies. As more inter-firm relationship forms, there are a new concern on how to select a trustworthy partner, how to develop good relationship, and how to conduct international collaboration. Animation game companies experience greatly from inter-firm trust issues, because as a relatively new industry, there is no standard to choose partners, limited way to measure performance, and not enough experience on internationalization. Thus, this research chooses animation game companies to explore the process to develop trust, and compare it in different national culture contexts.

Literature Review and Research Design

Culture is a value system shared by a group of people, and it can influence the way people behave (Hill, 2000). The main streams of culture studies include national level, regional level and organizational level. In this research, national difference is considered as an influential factor on trust issues, as it is explored already by many researchers. Dimensions of national culture can be generated as Table 1 from Hall's classic patterns, Hofstede's cultural dimensions, Hampden-Turner and Trompennar's cultural dilemmas and Schwartz value inventory. The dimensions indicate orientation towards time (long vs. short term; monochronic vs. polychronic), hierarchical structure (power distance), teamwork (individualism vs. collectivism), performance (masculinity vs. femininity), uncertainty to external environment (uncertainty avoidance), and language content (specification vs. diffusion).

The study of trust is originated from international business, and the growth of virtual technology, such as internet. Current literature focuses on the nature of trust, which can be seen as competence, reliability, goodwill and loyalty. As Table 2 shows. Competence trust is based on professional competence, such as technology and management skills. Reliability trust is developed on the clarification and standardization of contract. Goodwill trust emphasizes the emotional factors and good intention during collaboration. Loyalty trust can be developed from other sorts of trust toward a long-term close relationship.

Table 1

Dimensions of National Culture

Key dimensions	Resources
Long vs. short term orientation	Hofstede
Monochronic vs. polychronic	Hall
Power distance	Hofstede, Hampden-Tuner and Trompennar, Schwartz
Individualism vs. collectivism	Hofstede, Hampden-Tuner and Trompennar, Schwartz
Masculinity vs. femininity	Hofstede, Schwartz
Uncertainty avoidance	Hofstede
Specification vs. diffusion	Hall, Hampden-Tuner and Trompennar

Table 2

Types of Trust

Types of trust	Alternative definition and resources
Competence	Cognitive (McAlister, 1995), Competence (Gabarro, 1979; Sako, 1992), Technical (Platts, 2004), Ability (Mayer, 1995)
Reliability	Predictability (Rempel, 1985; Handfield, 2003)), Contractual (Sako, 1992; Platts, 2004)
Goodwill	Affective (McAlister, 1995), Goodwill (Sako, 1992; Platts 2004), Integrity and benevolence (Ganesan, 1994; Mayer, 1995)
Loyalty	Faith (Rempel, 1985)

Trust can also be viewed as a process containing stages and activities. Lewicki and Bunker (1996) developed a model of “calculus-based trust”, “knowledge-based trust” and “identification-based trust”. When exploring the detailed activities to facilitate trust and inter-firm trust, reputation management and negotiation process were highlighted (Eisenegger, 2010; Williamson & Ouchi, 1981), and sometimes trust can be formed through the help of intermediary or third party (Ferrin et al., 2006). During the collaboration, there is a dilemma of how to share information effectively and how to avoid potential risk of losing IP, as a result, selecting a trustworthy partner is highly important (Jap & Anderson, 2007). Other research also covered the formation and repair of trust, and impact of trust on alliance performance (Krishnan et al., 2006; Robson et al., 2008).

There are some studies on the interaction with national culture and trust. Family oriented collectivism is proposed to be important to Chinese collaboration, whereas reliability, predictability, fairness and professionalism are regarded higher in western society (Jiang & Chua, 2010). Mechanisms to overcome national differences in trust are suggested as “investment in frequent interaction”, “shared professional background”, and “intermediaries” (Gerbası & Latusek, 2010). Li (2010) proposed a framework on inter-cultural issues in trust, and strategies to deal with such differences, which indicate the positive trend from culture neglecting towards attention and commitment, eventually reaching long-term trust.

From literature review, it is clear that trust has different constructing components of competence, reliability, goodwill and loyalty. However there is still lack of knowledge on how these components are built along with business collaboration. Moreover, a systematic study to connect culture dimensions with trust is still in need. From these research gaps, this paper aims to: (1) identify key activities and stages of trust building-up process; (2) compare different processes with national culture origins; (3) propose a framework to connect culture dimensions with trust components. The nature of the research requires a theory building approach. Qualitative method is chosen as the appropriate way to unveil the details of trust building-up process. Three case studies on animation game companies are presented in terms of company background, activities of developing partnership, process mapping of trust, and the performance of inter-firm relationship. To combine the timeline of collaboration, the whole process of trust is divided into three stages. Trust formation is from the moment of idea conceptualization, towards partner selection and collaboration (usually with a contract). Trust development is correlated with the collaborated project. Trust continuation is from the end of project towards further relationship development. Single case analysis focuses on trust development process. Cross-case analysis will compare the three process model from each single case along with their national culture—China, USA, and Japan.

Case One: Chinese Game Companies

Focal Companies and Background

The participating firms in Case One are Chinese game companies 1A and 1B. The collaboration network is drawn as figure 1.

Company 1A is a leading game company in China, with main business to offer MMORPGs (multi-player online role-playing games) and online games. The company grows rapidly through series of acquisition and external partnership building. Keeping collaboration and innovation are regarded as core competence, the CEO of 1A promoted “1820” project in 2006—meaning on the 18th of every month, 1A’s management group will listen to the creative ideas from the external SMEs, and invest on interesting business plans. The first “1820 project” partner is company 1B, which was a newly established studio consisting of 11 people.

Figure 1. Relationship connection of case one.

Activities and Poces

Originally the CEO of 1B worked in 1A as a director in art design department. After three years of working experience, he and three other colleagues who co-operated in the same team decided to leave 1A and established their own business in 2006. The beginning of this 1B company was frustrating, as there were no sufficient funds and people; however, the dream of developing game with creative ideas never ended up. When hearing 1A's "1820" plan, 1B went back to 1A with a proposal which included their understanding about online game market, the notion of MMORPGs, the comments on current online game operation evolution, and the analysis of the pressure that general game operators faced. Most importantly their passion and persistence on dream moved the CEO of 1A, who was personally a friend of the CEO of 1B. The conversation was free, warm, and honest, according to 1B. The trust between the two companies was quickly formulated as 1A decided to invest eight million RMB into the project on producing the original game on a ghost fighting story. The warm relationship maintained from the very beginning.

During the collaboration, 1A made carefully plans on the conception, technology, and art together with 1B. Also 1A continuously sent people to 1B to solve R&D related technique problems, and provided 1B with knowledge and management skills. The top managers of both companies communicated frequently both formally and informally. There was a common goal of the team to success. The game product was finished in 2007, just one year after the collaboration.

When the project completed, 1A kindly supported for the promotion and publication of the product, which helped 1B's new online game gain success and reputation among young players. According to 1B's CEO, their product was a child born by 1B, and it was 1A who raised him up and brought him to the outside world—"if 1B is the mother, then 1A is the father". 1B now grew up from a nine people team to a 35 people professional studio. The project with 1B was a successful beginning, and the relationship lasted during open resource sharing, and co-development of new products.

The trusting relationship between 1A and 1B started with personal relationship development, as 1A and 1B's CEOs are personally friends, and 1A's openness to external opinions. This goodwill based trust makes the collaboration smooth. Performance assessment was also developed; however, it was not in a standard way. Contract was built based on shared interests. During the collaboration, goodwill is enhanced through

information sharing and personal interaction. In the meanwhile, technology was improved for problems solving. At the end of the project, because of goodwill and the forming of social community, long-term networking was formed which resulted in loyalty trust. Technology factors and business ideas as competence trust became the next target for co-evolution. Figure 3 maps out the development route of trust between 1A and 1B.

Results and Performance

The collaborated project in Case One started with relatively high trust, based on goodwill (openness, friendship), and competence (innovative idea and performance assessment). It increased as goodwill (friendly attitude) developed when project was going on. When project ended, the trust continued to increase at a high level, which resulted in further competence development and loyalty factors (co-evolution). Figure 4 describes the results and performance of trusting relationship in Case One.

Case Two: USA Animation Companies

Focal Companies and Background

Case Two is the collaboration between 2A and 2B, two USA animation companies. 2A was in charge of R&D, and production, while 2B major focused on marketing. The relationship network of 2A, 2B and their related companies is shown in Figure 4.

Figure 2. Trust building-up process of case one.

Company 2A is an animation studio based in California with technical, creative and production capabilities to create animated feature films and related products. The company pays much attention to technological innovation and makes every effort to achieve more in each movie produced. Its culture is well-known as highly innovative, collaborative with group learning, cross-functional learning and daily feedback in a non-hierarchical structure. In its early age of establishing the company, 2A built its own tools to develop higher end animation, and licensed tools to others, which constituted 4% of its revenue. Its software included 3-dimension graphics rendering program, 3-dimension animation scheduling and lightning, and production management software. In order to train employees with latest technology, a university was built to support the learning program.

Company 2B is a world-leading large media and entertainment conglomerate. Originally known for its production of animation movies, it has grown through 80 years to a variety of service including studios, being an owner and licensor of 11 theme parks and several television networks. Internally, it has a strict global standardization, and encourages creativity management from top level. Its culture is described as task specific feature and target oriented approach. Externally, the company has the strategy of marketing, licensing with a systematic process of choosing capable partnership. Meanwhile, it shows interest on animations using updated computer technology, and absorbs new competence through M&As.

Activities and Process

The road of collaboration between 2A and 2B can be traced back to the early 1990s, when 2A already demonstrated success of 3-dimension computing graphics technology in producing short films. Money became a big problem because of the high investment in technology innovation. Meanwhile to establish a higher reputation in animation industry, 2A urgently needed the opportunity to produce full movie, and better capability of marketing and distribution. Being 2A's major buyer of software especially computer assisted animation post-production software system, 2B realized 2A's competence in 3-dimension technology development, which was then a shortcoming in 2B with the dominant technology still traditional 2-dimension graphing. To fulfill both requirements, collaboration was established in 1991 between the two companies with a formal contract based on specifying each role (Table 3). This contract clearly defined responsibility, cost, pieces of technology—2A mainly focused on production, and 2B was in charge of marketing and publishing. Rather than long-term oriented, this contract was as case-to-case agreement. Altogether they planned to collaboration on the production of five animation movies.

Table3

The Agreement Factors Between Company 2A and 2B

	Feature film agreement	Co-production agreement
Date	May 1991	February 1997
Length	One movie. Two additional movies at 2B's option. Second movie: exercised in august 1995	Until the fifth film is delivered (about 10 years)
General Description	Development, production and distribution of up to three feature-length motion pictures that would extend to at least 1999 if the movie options were exercised.	Development, production and distribution of five feature-length motion pictures. The first movie in the agreement is the third one of the previous agreement
Cost	Disney is responsible up to certain budgeted amount that had to be pre-approved. 2A will cover a share of costs over budget, recovering this amount if the revenues exceed certain level. Part of 2B's contribution would be deducted from 2A's revenues	Cost are shared 50-50. 2A has final say on budget up to a certain limit. 2A in charge of production, 2B representative-approved by 2A-supervises cost. Over-budget cost is shared 50-50.
Distribution	In 2B's hands. They decided when and how to release a movie	2B is solely responsible for financing and has final control of marketing and distribution. Restrictions on when to release a film. 2B to market and distribute in the same manner as 2B's own premier animated movie. 2A may appoint a marketing and distribution representative who has no decision-making authority. 2A participates in licensing decisions
Revenues	Small percentage (10-15) for 2A. The percentage increases with the success of movies. Started with 10%.	50-50 percentage, with 2B receiving a 12.5% distribution. 2A has the right to audit 2B's accounting
Ownership	2A can use technology. If they sell technology to others, 2B has the right to get a license. 2B owns films and characters	2A owns technology. Films and characters belong to 2A and 2B. Treatments that 2B doesn't pursue revert to 2A. 2B has exclusive distribution and exploitation right

(Table3 continued)

	Feature film agreement	Co-production agreement
Creative control	Mutual approval of 2B and 2A; in case of disagreement the final decision is in 2B's hands	2A and 2B, subject to dispute resolution mechanism. 2A had full creative control of certain films.
Termination	2B can terminate the agreement at any time. 2B can abandon production at any time after paying a fee. 2B retains ownership of films and characters even for abandoned films. If 2B decides not to proceed with the project, it can sell its rights to 2A by a price equal to the costs incurred	2B may terminate if a competitor acquires 50% or more of 2A

Adapted from ECCH case resource reference No. 9-709-462.

During the collaboration, because of the success of their first movie, 2A required to revise the contract for equal share. After several arguments, the new agreement was reached (Table 3) in 1997. Conflicts started in 2000, when 2B initially encouraged 2A to make a “direct to video” movie instead of theatre movie, to keep the cost low. 2A argued that home videos had different standard of quality, which was bad for their souls and concept of innovation. 2B disagreed on changing contracts, but finally compromised, as 2A insisted on it. However, the “epitome of innovativeness with its free-wheeling culture” in 2A became incompatible with 2B’s “old media conservatism”. Also 2A demanded that this film be counted in the five picture collaboration as they agreed in contract, but 2B refused on the grounds that this movie was not an original one. 2A felt that the whole deal was disproportionately loaded in favor of 2B. Through each new movies, 2A developed some new technology, for example, the refinement of 3-dimension world projected onto 2-dimension with sufficient details; realistic looking for on the character, and vivid ocean and fish movement. 2A kept close with innovation happening in the academic community, but there was very limited mutual learning and sharing between 2A and 2B. The personal relationship between CEOs of the two companies was bad. When contract ended in 2003, 2A wanted to re-establish new agreement in which it independently controlled production, paying 2B only distribution fee. After 10 months of negotiation, they failed to reach new agreement.

After parting with 2A, 2B had to choose between investing in new technology, cherishing the existing talents, and finding new partners. Then it realized the value of 2A, which converted from its co-operator towards competitor. On the other hand, after losing support from 2B, 2A had to face the increasing competition from rival studios, and to decide on the timing of theatrical release and related products, the marketing and distribution strategy, the extent of promotional support by itself. 2B’s new CEO also gradually realized that the value difference between the two companies was understandable, as 2A’s culture of collaboration and innovation had its roots in 2B’s early age, and it was necessary to push creativity in 2B. In the meanwhile, media and creative industry entered the new period of digital age with the introduction of new digital platform instead of traditional forms of films and TV shows. The CEO of 2A had close network with new digital platform (in fact, this CEO was also the CEO of an influential new digital platform company), and the 2B company had a huge customers’ database. The co-operation will achieve long-term mutual benefit. Also, as there were already lots of characters developed during the collaboration between 2A and 2B, these characters can enrich the consumer goods and theme park development. Through further networking, 2A and 2B’s relationship become better and closer. In 2006, the two companies merged (or 2B acquired 2A) together with the common goal of delivering high-quality, compelling creative content to consumers, application of new technology and global expansion, and driving long-term shareholder value.

Again formal agreement, including human resource, technology, branding, locating was stated. Being interdependent on each other, the major role of 2A was to produce and develop technology, and 2B was responsible for marketing and distribution.

There was clear allocation of tasks from the very beginning. 2A was in charge of production, while 2B did marketing. After re-negotiation during collaboration, the roles were even clearer, with cost and IP issues further clarified. After the re-collaboration through M&A, 2B further planned to enter new media industry, and further develop character business.

Figure 5 describes the way 2A and 2B developed inter-firm trust. The collaboration began with the technology and responsibility specification, a way of promoting contract and reliability trust. In the meanwhile, management skill and technology were assessed in order to find the most suitable partners. This was done by both 2A and 2B as a way to form competence trust. During the collaboration, competence trust was improved as the major way to solve problems. There was a period when companies ignored the goodwill development. After the relationship broke up, they started to re-build collaboration based on competence and long-term goal. Goodwill was then developed through more personal interaction and mutual understanding.

Results and Performance

The collaborated project in Case Two was started with medium level of trust by competence. When contract was achieved, trust was high. However, because of limited goodwill, when project ended, the trust was low. As competence and goodwill developed after the project, further trust would start again aiming at co-evolution and common goal. Figure 6 describes the results and performance of trusting relationship in Case Two.

Figure 5. Trust building-up process of case two.

Figure 6. Development trend of trust in case two.

Case Three: Japanese Game Companies

Focal Companies and Background

Case Three is the collaboration between 3A—a Japanese company with its Japanese partnerships in game context and software designs. 3A is a game hardware and software manufacturer which was established in 1880s. The early stage of its business was diverse including hotels and food industry. It entered the electronic era in 1970, being the first Japanese company to use electronic components in toys. Its first big success came with an introduction of game product in 1980s, and later entered USA and other international market by setting up subsidiaries and collaborations. By integrating the whole supply chain—a typical Japanese way of supply chain management—it owned or contracted hardware manufacturers, controlling carefully on the quality of developers and publishers' product, and maintaining strong alliance with large distributors. Software developers and publishers who wanted to work on 3A's hardware must follow a strict agreement. Till the mid-1990s, it dominated the Japanese and even global market in game industry. However, competition was fierce when its competitors entered the market with more innovative technology and better partner relationship. 3A's market share fell dramatically during the next 10 years. In 2006, after years of R&D, improving relationships with third-party software developers, it launched a new simple console aiming at entertainment for the general public. This product won great success, and demonstrated the importance of relationship building with others.

A model of 3A's network structure is demonstrated as Figure 7. Conducting a role mainly as hardware OEM, it outsources most of the hardware production to subcontractors and control on them. It also owns or control publishers to publish its new game products. 3A also controls on game developers, and keeps close relationship with big distributors who have strong powers in the controlling of retailers. As a game company, 3A largely depends on customers. In its new strategy, there is much interactive communication with consumers.

Figure 7. Relationship connection of case three.

Activities and Process

From 1980s to 1990s, 3A was dominant in the game industry. It had the power of handling all of its manufacturing, both hardware and software, by using a network of subcontractors, some of which were partly owned by 3A. In terms of hardware, 3A encouraged subcontractors to upgrade their capacity by introducing new products just when old product sales began dropping off, by demonstrating 3A's commitment to the products through large advertising budgets, and by delaying product introductions until adequate software had been developed and substantial market research had been done. In this way, 3A felt secured and sustainable. It also kept its game hardware simple, specialized for the purpose of playing games. Software development was also strictly controlled by 3A.

During the era when 3A dominated the Japanese game market, numerous third party software developers and game publishers came to 3A for collaboration. 3A did not let anyone write software for its machines. Instead, it had a strict way to select partners, and controlled who would be licensed to create and market games for its machines and how they would actually do so. 3A's first six licensees in Japan had contracts that allowed them to manufacture their own cartridges upon paying a royalty fee to 3A. All subsequent licensees were subject to much stricter controlled by 3A over the design, manufacturing, and marketing process. Each contract had slightly different terms, depending upon the resources and track record of the licensee, but all shared certain basic elements. For example, no software developer could manufacture its own cartridges, but instead had to purchase them from 3A. Meanwhile, ordinary third-party developers kept on approaching 3A to demonstrate their capability in the hope of getting a license to work with 3A. It tightly controlled the development process by forcing licensees to submit final game prototypes to the company for review and approval before it would allow the game to be sold. This review process added an average of three months to the eight to nine months normally required to develop a game. 3A could review games, make strong suggestions, and warn developers that it did not think the game would succeed. Under the terms of the licensing agreement, 3A judged game content appropriateness; checked for bugs; set manufacturing quantities, and did all manufacturing through its subcontractors. In addition to develop high-quality software and cheap, specialized hardware, 3A also formed a strong alliance with a distribution company who was a powerful

consortium of 50 toy and game wholesalers in Japan. In this way, it gained control over the distribution channel and retail environment for its own and its licensees' products. This control and vertical integration gave 3A further power over its software licensees. It controlled their access to retail shelves through its ability to introduce and remove titles at the retail level.

This model of high control and integration in collaboration remained profitable for 3A and its partners until the mid-1990s. Although unhappy partners had to do their best all the time, they remained in alliance for the common profit. However, in the 1990s, one of 3A's major competitor entered the Japanese game market with cheaper, better quality of console, and most important, a favorable cooperative attitudes towards the third party software developers. 3A had no intention to cut down its hardware cost for developers and publishers to purchase. As a result, there were increasingly complains from the oppressed software developers. The strong control and integration caused antitrust in the relationship. However, 3A did not give up strict standard in contract and packages. Developers suffered from the unfavorable licensing deals, and considered 3A too arrogant, being difficult to deal with. Some developers left 3A to make new hope with other console hardware providers. One partner even sued 3A's antitrust monopoly behavior. 3A tried hard to improve on the existing feature of its video game hardware and software to boost sales; however, it failed to attract developers and customers. One of its major software partners, who previously developed some finest RPGs for 3A's console left 3A because of disagreement and bad relationship among the company leaders. This event indicated 3A's arrogant and different visions with its partners. In 2001, 3A lost its market leadership, and its competitor gained 70% of the global market.

After years of failure, 3A gradually realized that there was no choose but to work with partner's side-by-side. Partners included customers, hardware manufacturers, software providers and other companies. To regain its leadership position, 3A needed to be more open and friendly. To delight customers, it established an online community by offering incentives in return for customer information. The company also selected a group of experienced gamers based on the value and frequency of their community contributions. Through this community, 3A gained valuable insights into market needs and preferences. Also, its relationship with game developers was deeper and closer than before. 3A learnt the lesson that software developers were the catalysts that helped to keep the game industry engine moving. They began to establish partnerships with most talented, imaginative, and hard-working individuals and studios available in the industry. Many previous collaborators came back because of its growing attitudes of friendship and openness. 3A supported these companies with its assets, additional funding and ideas. It also licensed previous characters for partners to further develop. For one of its key collaborator, 3A loaned it money to start a new development house and studio, which exclusively producing advanced game for 3A. Because of close relationship and community, 3A learnt a lot both in terms of ideas and technology. In 2006, it introduced a new console, aiming for the general players. Its game became successfully again. In the meanwhile, they paid attention to the network with developers. According to 3A now, partners are their friends, colleagues, and acquaintances, and the relationship should last for long-term.

Figure 8 is the process of inter-firm trust between 3A and its partners of game developers. The way of selecting partnership follows the loyalty formation, which contains relationship assessment, and long-term orientation. Competence trust was also considered with management and technology assess. During the project, the improvement of technology enhanced competence trust. In the meanwhile, companies realized the importance of goodwill, and started to show friendship with an open attitude. Through social communication, further loyalty trust will be continued after the project.

Figure 8. Trust building-up process of case three.

Results and Performance

The collaboration in Case Three started with high level of trust by loyalty. However, it declined because goodwill was not enough during the project. As companies realized it, it began to show kindness and willingness to contribution, which resulted in trust enhancing. Figure 9 can describe the results and performance of trusting relationship, and how it developed as the collaboration went on in Case Three. The trust was high at the beginning, failing down during the collaboration, and increasing again after the re-collaboration.

Figure 9. Development trend of trust in case three.

Cross-case Analysis and Key Findings

Key Activities to Build up Trust

Based on the analysis of activities in each case study, key decision making areas related to inter-firm trust can be identified. In trust formation stage, reputation management, negotiation on contract development, and third party introduction are key issues. Also the assessment of competence, goodwill and relationship can be observed in cases. In trust development stage, learning and sharing help to create goodwill. Contract improvement enhances reliability trust. Technology and management development re-enforce competence trust. Trust can be further increased through effective conflict management. In trust continuation stage, the improvement of technology and management generates future competence trust. Goodwill trust can be enhanced through personal friendship building-up. Long-term vision, community development, and resource integration such as M&A will form loyalty trust.

Throughout case studies, the four types of trust—competence, reliability, goodwill, loyalty can be observed. They are developed along with the collaborated project. Key activities in each case are summarized as Table 4.

Table 4

Activities in Trust Building-up Process

	Case One (Chinese company)	Case Two (USA company)	Case Three (Japanese company)
Competence Trust	Competence is a broad concept, referring to both technology and management styles. Companies value their partner generally in terms of their potentials. Even though competence is not well-developed, skill collaboration can take place. Companies tend to sharing and developing competence together during the project, and sometimes even after the project, one a long-term base.	Competence is more specific, referring to particular technology (e.g. 3-dimensional drawing skill), marketing skills. Company select partners based on their proved competence (e.g. patents, existing products). Company may select a partner who never work together before, as long as it has proved competence. Technology related issues will be clearly written in the contract.	Competence is a combination of general management skills and specific technology know-how. Companies select partners with a strict competence evaluation process, sometimes on a continuous base. Continuous improvement and shared technology development is common in business collaboration.
Reliability Trust	Contract is used in most collaboration, however, sometimes not in a formal way Contract is built on mutual benefit, and sometimes can be changed during the collaboration Relationship building works more effective than a written contract.	Contract is important, as it clearly define roles and responsibilities, cost, IP issues, etc. Contract has a long-term goal, but also a case-to-case detailed short-term goal. Sometimes contract changed, but skill with details in a formal written way.	Contract is formal, often with a long-term goal. Sometimes it is established to control the project. Control system and regular review of the contract.
Goodwill Trust	Networking and external collaboration is regarded more important than internal competence develop. Sometimes motivation and emotional factor are as important as friendship. Inter-personal relationship and informal communication is important.	Inter-personal relationship is not so important, as long as there is mutual respect.	The case company started to realize the importance of showing kindness and respect to its partner after some failure.
Loyalty trust	Once collaboration starts, companies tend to develop long-term relationship, often in an informal way.	N/A	Long-term relationship building is highly encouraged. It sometimes can become pressure for SMEs who are dependent on large companies. Relationship can be maintained as a formal or informal community.

Trust Models in Case Countries

In case studies, the prioritizing behavior is observed in companies in China, USA, and Japan. Chinese firms (Case One) place high priority on goodwill, principally on friendly attitude and passion factors. USA (Case Two) companies consider more on competence and reliability trust, especially on technology capability, business judgment, standard pieces, negotiable contract, and role specification in contract. Japanese (Case Three) company views competence, reliability and especially loyalty trust important.

The Chinese model (Figure 10) begins with goodwill development and relationship assessment. It sometimes neglects the contract building and reliability trust stage. Subsequently, loyalty trust is considered during the collaboration, and competence trust is further developed along with the loyalty trust. Goodwill is re-enforced through the project, and leads to future collaboration.

Figure 10. Chinese way of developing trust.

The USA model (Figure 11) commences with competence trust, and is enforced by reliability trust. It sometimes develops into loyalty trust if the competence is continuously recognized by each other. Goodwill trust will be developed along with loyalty trust. Moreover, competence is improved during the project, which results in further collaboration and further inter-firm trust formation.

Figure 11. USA way of developing trust.

The Japanese model (Figure 12) starts with loyalty trust and relationship assessment. It is then further secured by competence development and contract. Furthermore, goodwill trust is developed later during collaboration, while loyalty is highly emphasized and re-enforced throughout the project leading to long-term collaboration and inter-firm trust in future collaborative projects.

Figure 12. Japanese way of developing trust.

Linking Trust with National Culture

To trace back to national culture, the Chinese companies show an emphasis on the harmony among people. For example in case one, whenever there was a problem, companies would work together with an active way, rather than to blame. In this culture of collectivism and slightly low masculinity, goodwill is highlighted. USA companies are from a culture with masculinity and specification, which prefer performance, and clear information in a contract. In case two, companies defined contracts, especially responsibilities and pieces of technology clearly. For them, competence and reliability trust are most important. Japanese culture is long-term oriented with masculinity and high uncertainty avoidance, which is related to loyalty, performance based competence, and formal contract based reliability trust. In case three, Japanese companies had strict way to control product quality, and maintain relationship closely in the long run.

In general, the requirement of culture elements in each type of trust is predicted in Figure 13. Competence trust is built on the fact that companies have unique capabilities and performance, which can be traced back to the culture of masculinity as seen in USA cases. Reliability trust is fostered by a clarified contract, and it requires a culture of specification (people exchange information officially, such as through reports and contracts, rather than personal relationship), and monochronic time orientation (task is fulfilled according to schedules and deadlines). In such culture context, USA cases show particular preference of clear contract. Goodwill trust is based on the kindness and benevolence, which are seen in the case of Chinese companies with a relatively low masculinity (femininity-good relationship) and collectivism culture. Loyalty trust is developed over a long time, and sometimes maintained by high power (power distance) and control as in the Japanese case.

Figure 13. Trust types and culture requirements.

Conclusion

The aim of this research is to identify the process of inter-firm trust development, and uncovering the ways in which trust can be influenced by national culture. As a theory building research, this study contributes to the theory of trust, and the inter-firm trust issues from national culture perspectives. The main findings include activities in the three stages of trust formation, development and continuation. Four types of trust—competence, reliability, goodwill and loyalty are generated along with business collaboration. From case studies, three different ways of creating trust can be observe in Chinese, USA and Japanese companies. Chinese companies follow the sequence of goodwill, reliability, loyalty, and competence, with preference on goodwill. USA companies prefer the process of competence, reliability, goodwill, and loyalty, emphasizing competence and reliability factors. Japanese companies follow the way of loyalty, competence, reliability, and goodwill, highlighting the importance of loyalty and competence. The paper also proposed a framework, linking key dimension of national culture with trust components.

This research has adopted qualitative method, which has some limitation, as cases cannot represent companies of a large scale. In fact, each individual company may have its unique business module and culture. Also, the framework linking culture with trust, trust elements and related activates are generated from case observation and company interviews. More quantitative testing should be used to improve the framework in the future.

References

- Eisenegger, M. (2010). *Trust and reputation in the age of globalization*. Reputation capital: building and maintaining trust in the 21st century. Germany: Springer.
- Ferrin, D Dirks, K., & Shah, P. (2006). Direct and indirect effects of third-party relationships on interpersonal trust. *Journal of Applied Psychology*, 91(4).
- Ganesan, Shankar.(1994). The Making of a Successful Global Supply Chain. *World Trade*, 17(12), 19-22.
- Gabarro, J. (1978). The development of trust influence and expectation. *Interpersonal Behavior*. Englewood Cliffs: Prentice Hall.
- Gerbasi A., &latusek, D. (2010). Paper from the 5th workshop on trust within and between organizations:*The process of trust-building in international business venture—the case of US-Poland cooperation*.
- Hall, E.T. (1959). *The silent language*. New York: Double Day.

- Hall, E.T. (1969). *The hidden dimension*. Man's use of space in public and private. London: Bodley Head.
- Hall, E.T. (1976). *Beyond culture*. Garden City, N.Y: Anchor Press.
- Hall, E.T. (1984). *The dance of life: the other dimension of time*. Garden City, N.Y: Anchor Press/Doubleday.
- Hampden-Turner, C., & Trompenaar, F. (1993). *The Seven Cultures of Capitalism*. New York, NY: Currency/Doubleday.
- Hampden-Turner, C., & Trompenaar, F. (1997). *Riding the waves of culture: understanding cultural diversity in business*. London: Nicholas Brearley.
- Hampden-Turner, C., & Trompenaar, F. (2000). *Building cross-cultural competence*. West Sussex: John Wiley & Sons Ltd.
- Handfield, R. (2003). Can You Trust the Trust in Supply Chain Relationships? Supply Chain Resource Consortium (SCRC). Retrieved from <http://scm.ncsu.edu/public/hot/apics031101.html>
- Hofstede, G. H. (1980). *Culture's consequence: international differences in work-related*. Beverly Hills: Sage Publications.
- Hofstede, G. H. (1994). *Cultures and organizations: Software of the mind: Intercultural*. London: HarperCollins.
- Hofstede, Geert. (2001). *Culture's Consequences, Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks, CA: Sage Publications.
- Jap and Anderson. (2007). Testing a life-cycle theory of cooperative interorganisational relationships. *Management Science*, 53(2).
- Jiang, C.X., & Chua, R. (2010). Paper from the 5th workshop in trust within and between organizations: *With my head or with my heart? A study of how Chinese executives trust overseas Chinese and non-Chinese business partners*.
- Krishnan, R, Martin, X., & Noorderhaven, N. (2006). When does trust matter to alliance performance? *Academy of Management Journal*, 49(5).
- Lewicki, R. J., & Bunker, B.B. (1996). *Developing and maintaining trust in work relationships*. Trust in organizations: frontiers of theory and research. Thousand Oaks, CA: Sage.
- Li, P. (2010). Paper from the 5th workshop in trust within and between organizations: *Intercultural trust and trust-building: The contexts and strategies of adaptive learning in acculturation*.
- Mayer et al., (1995). An integrative model of organizational trust. *Academy of Management Review* 20, 709-734.
- McAlister, D.J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38, 24.
- Platts, J., & V. Tomasevic. (2004). *Developing Productive Relationships in the Construction Industry*. Practising Philosophy of Management, St. Anne's College, Oxford: Gabarro.
- Rempel, J. K., Holmes, J.G., & Zanna, M.P. (1985). Trust in close relationships. *Journal of Personality and Social Psychology*, 49, 95-112.
- Robson, M., Katsikeas, C., & Bello, D. (2008). Drivers and performance outcome of trust in international strategic alliance: the role of organizational complexity. *Organisation Science*, 19 (4).
- Sako, M. (1992). *Prices, quality and trust: Inter-firm relations in Britain and Japan*. Cambridge: Cambridge University Press.
- Schwartz, S. H. (1992). *Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries*. Advances in Experimental Social Psychology. M. Zanna. San Diego: Academic Press.
- Schwartz, S. H. (1994). *Beyond individualism/collectivism: New dimensions of values. Individualism and collectivism: Theory application and methods*. Newbury Park, CA: Sage.
- Shi, Y., & Gregory, M. (1998). International manufacturing networks: to develop global competitive capabilities. *Journal of Operations Management*, Vol. 16, 195-214.
- Skinner, W. (1964). Managing international production. *Harvard Business Review*, Sep-Oct.
- Williamson, O., & Ouchi, W. (1981). *The markets and hierarchies program of research: origins, implications, prospects*. New York: Wiley.