Journal of Business and Economics, ISSN 2155-7950, USA May 2015, Volume 6, No. 5, pp. 879-890

DOI: 10.15341/jbe(2155-7950)/05.06.2015/003 © Academic Star Publishing Company, 2015

http://www.academicstar.us



Understanding Inter-firm Trust from Business Ecosystem Perspective: Cases from the Current Chinese Animation Industry

Zheng Liu

(Xi'an Jiaotong-Liverpool University, Suzhou 215123, China)

Abstract: This paper aims to unveil the development process of trust in business ecosystem. As business grows from individual company operations towards collaboration cross functions with diversity of products, there is a requirement for companies to co-develop with the environment. This business ecosystem (BE) phenomenon is observed not only in mature industries, but also in emerging sectors such as the creative industry. The current rapidly growing Chinese animation industry provides a typical case. Key roles in the BE including initiator, adopter, and specialist can be identified in a collaborative animation product development. In-depth case studies are carried out into the relationship within the business ecosystem. Activities related to inter-firm trust are highlighted following the stages of trust formation, development and continuation. A proposed model of the forming of trust along with business ecosystem is generated from data analysis. Further research areas are also addressed at the end of the paper.

Key words: business ecosystem; trust; inter-firm relationship; supply chain, Chinese animation industry

JEL codes: M110, M190

1. Introduction

Manufacturing system now has increasingly extended from traditional in-house production towards network and globalization. Different companies are involved in collaboration, bringing news social and management issues. A new type of network, business ecosystem (BE), is created based on the co-evolution between firms and business environment (Moore, 1996). This concept has combined the features of strategic alliance, open innovation, supply chain management with more diverse system of products and broader collaboration range. Different companies, industry associations, policy makers also play important roles in the system. BE can be described as a repeating process starting from existing collaboration network to expansion, convergence and renewal stages (Moore, 1996). While the growth of mobile computing industry already demonstrates the emerging of BE, other sectors such as the Chinese animation industry in the recent 15 years also witness business model changes, increasingly more inter-firm collaboration, and the active involvement of different parties (such as industrial clusters), all-together nurturing a completely new business sector.

The Chinese animation industry first started in the 1940s when the movie "princess iron fan" was released. In the 1970s there was a blooming period of Chinese animation industry with many movies produced according to

Zheng Liu, Ph.D., International Business School Suzhou, Xi'an Jiaotong-Liverpool University; research areas/interests: culture, inter-firm relationship, trust. E-mail: zheng.liu01@xjtlu.edu.cn.

traditional Chinese art styles. At that time, most Chinese animation companies are State-Owned Enterprises (SOEs) with R&D teams and production studios. However since the 1980s, with the economic reform and open door policy in China, mostly local Chinese firms found difficulties in self-financing. Meanwhile overseas animation products entered the Chinese market with low price and more diversity of contents. Thurs, many Chinese animation companies lost the competition and gradually turned into contract/outsourcing studios producing animations for foreign companies. The capability of original design and character largely declined accordingly. In 2002, the Chinese government began to realize the importance of transforming culture through animation products. Instead of direct investing into large companies, the government decided to promote a business environment by setting up industry clusters and encouraging collaboration national-wide. Though the supply chain is still incomplete, the Chinese animation industry is growing fast with original designers, production studios, TV houses and clusters participating actively. In 2004, China's total cartoon production was only 29,000 minutes, while in 2007 the industry revenue was more than 200 billion RMB with a total production of 101,900 minutes. This figure continuously increased to 204,000 minutes in 2013 (Year Book of Animation Industry 2013).

As the BE of Chinese animation industry is gradually forming through government policy, clusters, collaboration and technology specialization, the issue of inter-firm relationship and trust building have emerged. This is because most Chinese animation companies are Small and Medium Enterprises (SMEs) who do not have the capability of integrating the whole value chain, and thus they rely much on the resources of others. There is risk of selecting a reliable partner and maintaining a good relationship. In addition, as the animation industry is still new in China, there are almost no standard for technique, skill and management; therefore companies are facing problems of choosing capable partners. An initial interview has been conducted to 30 Chinese animation companies, which shows that many managers are worried on inter-firm trust problems such as:

- (OEMs) "We cannot rely on publishers; even some well-known publishers can break their promises. Sometimes the publishers have money problems due to the unpredictability of market, and cannot (or unwilling to) pay; other times they are asking too much such as continuously asking you to modify some parts. Some big game operators are very demanding and powerful. They want to control the designers, and to interfere the designer company's daily operation."
- (OEMs) "Sometimes partners just copy your ideas without paying for it. It is annoying that you cannot state which part is your IP. It's not like those traditional industries with comprehensive way of protecting IP."
- (Outsourcing studios) "We are the weakest part in supply chain, so many times we have to listen to everything OEMs say, and try our best to maintain good relationship. Sometimes they may not behave well, but we still try to be kind. We hope that they will do well next time. We have to survive."
- (Outsourcing studios) "The changing of HR and policies causes problem. In one case, the manager from a game operating company changed, and the new manager did not agree to take the responsibility or maintain good relationship with us."
- (Outsourcing studios) "Some OEMs steal the design of our animation designers, saying that our samples do not meet the artistic requirement; however they use it for their own purpose without paying fee. We can do nothing currently. There are very few ways to protect our rights."

Trust, especially inter-firm trust, as a way to facilitates alliances is becoming sensitive in this fast-growing BE. In this paper, more exploration will be made to find out how trust is developed in the current BE of Chinese animation industry.

2. Literature review

2.1 BE and Roles in BE

There are different players in BE, each serving a specific role. From existing literature, three roles can be summarized as initiator, adopter, and specialist (Table 1). Initiator refers to firms which provide a general platform for others to join and to contribute. Adopter is the dominating company, normally Overall Equipment Manufacturers (OEMs) who use initiator's network, and produce compatible produces. Specialists are niche players who provide certain technique, service or other sort of capability.

Roles in BE

Sources

Keystone (Iansiti & Levien, 2002), Landlord (Iansiti & Levien, 2002), Shaper (Den Hartigh & Van Asselldok, 2004), Hub (Ilyer et al., 2006), Broker (Ilyer et al., 2006)

Adopter

Dominator (Iansiti & Levien, 2002), Opportunities (Den Hartigh & Van Asselldok, 2004), Bridge (Ilyer et al., 2006)

Specialist

Niche, Adaptor (Den Hartigh & Van Asselldok, 2004), Bridge

Table 1 Roles in Business Ecosystem

2.2 Trust between Organizations

The issue of trust has gained increasing more attention from academic research. Research areas have covered trust within and between organization, the interaction between trust with social, political, culture and institutional factors. To address the origins and nature of trust, different types are classified (Table 2). These include trust built upon professional skills and capability — competence trust; trust built upon an agreement — reliability trust; and trust built upon good intention and benevolence — goodwill trust.

V I			
Trust	Sources of trust		
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	Faith (Rempel, 1985), Affective (McAlister, 1995), Goodwill (Sako, 1992; Platts 2004), Integrity and benevolence (Ganesan, 1994; Mayer, 1995)		

Table 2 Types of Trust

More studies focus on a particular decision making area related with trust development in collaboration, such as reputation management (Eisenegger, 2010), negotiation (Williamson & Ouchi, 1981), third party intermediate (Ferrin et al., 2006), conflict management (Jap & Anderson, 2007), the stages of trust formation, maintenance, dissolution and repair in alliance (Krishnan et al., 2006; Robson et al., 2008).

3. Research Methodology

Literature suggests there is lack of understanding trust from BE perspective. Therefore this paper specifically it aims to identify:

- Role of initiator, adopter, and specialist in current Chinese animation industry
- Key activities of how trust is formed between initiator and adopter, between initiator and specialist, between specialist and adopter
 - Evolution of trust along with BE development
 To analysis trust process along with business collaboration process, three stages are defined as formation,

development and continuation. This is consistent with the product development stages. Trust formation refers to the business activities before a formal collaboration (usually in terms of a contract or specific project in the animation industry). It covers the business process of conceptualization, partnership selection, negotiation and contract building. Trust development refers to the activities during collaboration or project management. Trust continuation is a further extension of relationship after a certain project. During each stage, key activities related to competence, contract and goodwill trust will be identified through behavior from initiator, adopter and specialist.

The nature of this research requires for a theory building with qualitative methods. In particular, case and multiple case studies are selected to better explore the details (Yin, 1994; Eisenhardt, 1989). Three cases studies are presented in this paper. The analysis of each case follows the structure of "roles and background", "trust formation (before collaboration)", "trust development (during collaboration)", "trust continuation (after collaboration)". Cross-case analysis aims to identify the similarities, which will be further developed into a general process.

4. Case Studies

4.1 Case One

4.1.1 Roles and Background

The initiator of Case One (I1) is the culture & media division of Beijing government, who has promote projects in Beijing. It has rich network with governments, TV houses, and most large companies in Beijing. One of its key long-term partners is a TV house who helps I1 to generate ideas related to animation product project. This professional TV house can be viewed as adopter (A1) who design ideas according to I1's requirement, and join projects proposed by I1. A1 was established in 2004 with a broadcasting network covering 39 regions across China. It possesses a professional team of R&D and marketing. Through collaboration A1 worked with many outsourcing studios which are specialized in 2-dimensional or 3-dimensional drawing. One of these specialists in the network is S1, which is professional in 3-dimensional CG production.

4.1.2 Trust Formation

The forming of the network began with the project of a 100 animation TV series. The project was proposed and fully funded by I1. The aim was to provide Olympic knowledge in a interactive way to the general public before the start of Beijing Olympic 2008. When I1, working together with Beijing Olympic committee, agreed on the project, it began to find a company who can lead the project. As A1 was a close partner, and had big influence in Beijing and cross China, priority was given to A1 although it did not have enough production capability, as a company major in broadcasting and marketing.

A1 was happy to help I1 with this big project, and also took this opportunity to promote its public reputation. However it worried about whether the deadline can be met, mostly because it did not have enough resources to design and produce. The director of A1 decided to form a director team, getting 8 people involved who are experience and personally known each other as friends. According to A1, "We are a very close network. People are willing to help and stay in a small community". Also the public opinion was important. Through the co-operation with I1, an online forum was established to get ideas national wide. "It was incredible. People keep on calling us, or emailing about their innovative thoughts, which give us lots of inspiration."

To overcome the difficulty in production, A1 decided to collaborate with professional studios. The nature of this project required for co-operation of six 2-dimensional animation studios and perhaps one 3-dimensional studio who can do the layout with advanced technique. It was easy of A1 to find 2-dimensional studios, most of whom had previous collaborative experience with 1A before. According to A1, "These companies are coming to us all the time. When we have big project, we will outsource to them. They are reliable and friendly to us." However in the field of 3-dimensional drawing, A1 did not have such strong partner relationship. As they admitted: "It is hard to tell who is better than whom in terms of production. We need recommendations. We also need to find one partner first, and then extend our network."

On frequent communication with I1, A1 knew S1, who had strong connection with I1 by doing several exhibition promotion animations before. The growing of S1 was huge from a small 3-dimenional software development company to making of full CG movies. This unique technique capability won the recognition of I1, who outsourced several projects to S1, including the promotion movies of Olympic stadiums. On realizing the strong connection between I1 and S1, A1 decided to contact S1. On building up contract, the relationship was established as formal collaboration. According to A1, "we haven't worked with S1 before. We believe there should be other companies more capable, but the fact that S1 was highly recommended in A1's network made us believe in its behavior. We had a very formal contract to secure our relationship."

4.1.3 Trust Development

During the project, the coordination of different companies using new technology was the biggest challenge. As A1 admitted that they had not experience of 3-dimension layout, much work was relied on S1. S1 began to show its advanced technique and helped A1 to coordinate with other 2-dimensional drawing. Once other companies finished 2-dimensional drawing, the work then passed on to S1, who added 3-dimensional background and stadium models. Many problems were solved through the collective learning, and the expertise of S1. As A1 said, "Through the project, we learned a lot about the using of 3-dimensional technique from S1. Their willingness to contribution also made our relationship warm and friendly."

In the meanwhile, A1 also upgraded its ability of project management and scheduling. "We are now confident about how to conduct such a big project within short time. It was through the failure of several trials. Our partners gave us many suggestion and encouragement." In the project A1 developed a way of "multiple point to point" to coordinate different partners, and as A1 suggested, "In the future we will use this way to manage and lead other projects." The team worked side by side, sharing knowledge as much as possible, and communicated daily by web-meeting and telephone. They collectively learn the knowledge besides animation. This saved much time. Previously it took 20 days to complete one storyboard; by sharing and learning, it took 7-10 days to complete one storyboard in the later period of this project.

Although I1 at this stage did not directly participate in the project, it showed support and encouragement whenever needed. There was regular meeting and informal communication with the project team. According to A1, "as our investor, I1 did not interfere our daily operation. They fully trusted us, and provided supporting help."

4.1.4 Trust Continuation

The effort and passion that the team put into the project gained much appreciation form I1. When the project was finished, A1 gave an informal evaluation of partners involved. Highly positive comment on S1 was given "Through the project, we feel they are a professional team. Now we are thinking of establishing an education center together. We send our people to learn technique with them." The relationship between A1 and S1 also changed from pure collaboration towards more personal interaction. "We become friend personally. They are now

our close partnership like others. The future collaboration is so easy." Also, the A1 kept the network by further social interaction, and promoted collaboration with these partners in the long-term.

The activities of trust building up can be summarized as Table 3, which include the feature of competence (C), reliability (R) and goodwill (G) trust.

	Trust formation	Trust development	Trust continuation		
I1-A1	(G) Select A1 based on long-term collaboration and personal network (G) Co-develop public image with A1	(G) Encourage A1 when facing difficulty, providing help as much as possible	(G) Long-term partnership as before (G) I1 appreciate A1's behavior		
I1-S1	` '	(G) Encourage the team and frequent communication	(G) Though the project, and relationship become closer		
A1-S1	(G) Appreciate 11's recommendation of		(C) Program of learning in the future (C, G) A1 appreciate S1's professions and kindness (G) Personally become good friends		

Table 3 Trust Activities in Case One

4.2 Case Two

4.2.1 Roles and Background

The initiator in Case Two is a Shenzhen based animation cluster (I2). It is supported by Shenzhen government and media group. As a cultural industry base, it provides companies with infrastructure and administration system. The adopter (A2) is a Shenzhen based animation production house. Originally A2 spent long time designing and re-designing by using the latest software. It began to find partners to further develop animation related products, but it failed due to lack of experience and social network. It then came to I2, and later joined I2 as a member. Through the introduction of I2, A2 met S2, a character designer in Shenzhen, originated from a toy manufacturing sub-contractor for Chinese and Japanese animation OEMs. In 2007 the collaboration network was formed.

4.2.2 Trust Formation

In 2006, after two years of frustration, A2 gave up seeking partners by its own. At that time, the Shenzhen government set up a program to promote animation industry with the building up of an industry base I2. On hearing the news, A2 came to I2. The director of I2 was considerable and helpful. He patiently heard the story of A2, and moved by A2's passion of doing animation design even it was faced by serious financial problem. I2 understand A2's problem, and promised to find a capable partner to A2. S2 was a character business designer known by I2. Through years of outsourcing activities, it was capable on marketing and toy designing. In fact, I2 was thinking of developing S2 into a large company. Through the introduction of S2, A2 had a chance to meet S2. S2 listened patiently to A2's plan and visited their studio. Gradually through interaction, the two companies quickly sat agreement to collaborate in 2007. There was a joint project invested by both A2 and S2.

4.2.3 Trust Development

During collaboration, there was a time A2 not sure of how to produce a successful character. S2 offered its help by sending team working together. Normally character business was developed after the success of movie or TV release in China; however A2 and S2 agreed to develop the concept of character at the animation movie conceptualization stage. Products such as toys were promoted almost at the same time with the TV release. Because of mutual trust and willingness to contribute knowledge, they proposed this joint character design program, in which animators, producers, and character designers from both companies worked together. A2

trusted in S2's ability of designing and marketing. As A2 said: "S2 knew well of marketing and brand management. Through our collaboration, we learn that it is most effective to let the right professional people do the right task."

As for A2, it invested advanced facilities, and achieved better quality. A2 developed a system of 3-dimension animation capture by itself with updated rendering software. A production line with high efficiency was also established.

Also as a way of closer related, both A2 and S2 joined in I2. They had the chance to know the updated industry information, and kept close in the community. They also used a collaborative network for TV channels and got approach with overseas sales agencies through the bridge of I2. As S2 said, "I2 gave us lots of industry information, and helped us to know overseas market. We benefit a lot through their kindness."

4.2.4 Trust Continuation

After the collaborated project, A2 and S2 became personally friend. Because the relationship led to business success, in 2009, the two companies became one through. According to S2, "normally we don't consider M&A. But this time, A2 is so nice to us, and we feel there is a must to develop close relationship in the long run." The new company also paid attention to IP protection and reputation. This new company was still based in I2, who helped it with public promotion, and introduced it to international animation exhibition and collaboration with overseas companies. According to I2, they were "more than happy to help this new company", as "it was a brand and example of the industrial base."

The activities of trust building up in Case Two can be summarized as Table 4, which include the feature of competence (C), reliability (R) and goodwill (G) trust.

	Trust formation	Trust development	Trust continuation
11/-A/	(G) Provide listening channel and help to	(G) Provide information and community,	(G) Help the new company to go
	introduce partners.	help to promote	international
	(C) Recommend S2 because of its experience	I((4) Ioin 12 to contribute	(G) Promote the new company as
	of doing overseas marketing and design		an example
A2-S2	contribution (R) Co-invest on project	(C) A2 rely on S2's marketing (C) A2 upgrading hardware and software facility (C) G) Sharing of knowledge	(G) Friendly to each other
			(G) M&A, being happy with the
			collaboration
			(C,G) co-evolution for new
			technique

Table 4 Trust Activities in Case Two

4.3 Case Three

4.3.1 Roles and Background

In the BE of Case Three, the initiator (I3) is a Beijing based cultural industry association. By providing information and organizing industrial conferences, it offers a platform for companies. The adopter A3 is an animation concept designing company. It owned 20 people focusing on the design of 3-dimensional concept combining traditional Chinese art. The specialist S3 is a Nanjing-based outsourcing company with high 3-dimensional animation production capability.

4.3.2 Trust Formation

I3 was formed to introduce resources to companies, and to provide platform to companies know each other. A3 was a small company focusing on designing animation with traditional Chinese art style. The CEO of A3 was personally a friend of I3, and behaved actively in I3's events such as festivals, lectures and exhibition. It spent 3 years on research, and urgently needed a well-preformed partner to produce their animation movies with high

quality. I3 started to seek 3-dimensional production house for A3. Then it began to notice S3. Established in 1999, S3 is a Nanjing-based outsourcing company delivering high quality 3-dimensional animation. Originally it collaborated with western OEMs who are big names in game industry. Through big projects, it grew rapidly. By sending people overseas for training, it invested high-end software and develop an IP protection system. The quality of S3's products and its relationship with big western companies attracted I3, who then suggested several events for S3 to meet Chinese OEMs. The suggestion just interest S3, who gradually realize the fierce competition of outsourcing. Although they were confident about their capability, still there was no guarantee of maintaining long-term relationship with western clients. They were worried that, "These clients can move to our competitors who promise something better or lower cost. Every time we worked hard on sample production to show them we do better than others. But still, we had to pass a strict process." There was a need for them to upgrade along the value chain, moving towards more value-added activities. The move from game outsourcing to the production of animation movies with Chinese partners would be a good way to learn R&D with diverse service range. Through the introduction of I3, A3 and S3 formed collaboration based on contract of producing several short animation movies.

4.3.3 Trust Development

In the partnership between A3 and S3, it was A3 who provide well-designed concepts. S3 began to learn designing stills from A3. Through it, S3 had experience of developing 3-dimensional animation to CG and concept design. Based on existing collaborated project, it now can further expand the project range with high value added activities. In the meanwhile, the way of S3's management and technique helped A3 to restructure its organization. A3 sent people to S3 to learn risk management and IP protection system. Both A3 and S3 became friends of I3. They actively attended events, extend network, and attend courses on creative industry management provided by I3.

4.3.4 Trust Continuation

Through series of animation movie productions A3 and S3 became close friends. They appreciated each other's professions, and help to introduce other industrial friends into the network. Future collaboration was frequent, and sometimes there was no contract at all. Their products were highly recommended by I3, who continuously introducing new partnership into the collaboration. They said, "we are extremely close now. We help each other. Sometimes there is no contract at all."

The activities of trust building up in Case Three can be summarized as Table 5, which include the feature of competence (C), reliability (R) and goodwill (G) trust.

	Trust formation	Trust development	Trust continuation
I3-A3	(G) Help A3 to find partnership (G) Provide industrial invent (G) Personally good friends	(G) Help to make relationship closer	(G) Support with more network
I3-S3	(C) Recognize S3 by its projects with overseas companies	(G)Actively attend I3's event	(G) Introducing resource to S3
A3-S3	(R) Contract	(C) A3 trust S3 on its management and technique. Learn from S3	(G) Become close friend (G) Appreciate each other, introducing to new friend (G) Contract no longer important

Table 5 Trust Activities in Case Three

5. Discussion

5.1 Roles in Current Chinese Animation Industry

In current Chinese animation industry, the initiators are mainly government (I1) and its related organizations (I2, I3). I2, the industry cluster is a typical phenomenon. Clusters are supported by local government, and sometimes directly funded by government. So far there are five types of cluster "comprehensive, SMEs training, public service, leading firms, software/tech, and education" in China (2008 Chinese animation industry report), all of which provide platform and supporting infrastructure, such as:

- Introducing advanced facilities, human resources training, projects to companies including adopters and specialists.
 - Promote the product of adopters and specialists to Chinese and overseas market.
 - Building up a collaborative network for Chinese TV channels with companies in the cluster.

An initiator provides general support for adopters. They can also lead a project and participating in the concept design (Case One). In this case, they form a close relationship with adopters in the long term.

Adopters are OEMs, such as TV house (A1), animation production company (A2), or pure R&D company (A3). Adopters can also move to take the role of initiator. In Case One, after the project, A1 gained national wide reputation. It began to establish network and providing platforms for partners. It held animation competitions, wishing to extend the network. In this way it is growing towards an initiator. Now by collaboration, it has expanded the business of brand protection, character business, toy sales, and theme park.

Specialists are outsourcing studios (S1, S3) and companies with unique profession such as character business developers (S2). They can produce 2-dimensional or 3-dimensional models, animations, special effects, sound, and other technique parts. Many specialists previously do outsourcing project for western OEMs, and are experienced in terms of technology. They have limited capability of R&D. A specialist can also become an adopter by obtaining R&D capability. In Case Two, S2 and A2 merged together into a new company who has both R&D and production capability. The new company will lead an adopter role in the future projects by collaborating with other specialists for outsourcing and knowledge development.

5.2 Trust between Initiator and Adopter

The trust between initiator and adopter begins with goodwill trust. Typical because most initiator in current Chinese animation industry are local government or government related cluster, associations. These organizations have strong relationship with companies. They are established with the aim to help adopters who are local firms with overall competence. Initiators first provide a platform for adopters to get information. They sometimes also develop personal friendship, and offer help as intermediate to introduce specialists. During collaboration, the initiator provided suggestions, and help in terms of facility, public forum, feedback whenever adopters are in difficulty. After the collaboration, the initiators help to promote the product of adopters, and bring in new collaboration opportunities by extending the platform. The whole path is "goodwill-goodwill-goodwill-goodwill".

5.3 Trust between Initiator and Specialist

In trust formation stage, the initiators introduce specialists to the collaboration network mostly because of competence. The competence is known from previously collaboration experience with initiators, and from the outsourcing project the specialist did with big OEMs. During trust development stage, as there are more and more interaction among initiators, adopters and specialists, the relationship becomes closer and informal. Specialists sometimes join the events held by initiators. Through personal communication, initiators offer good intention and

support to specialists. After the project, the relationship continues. The path is "competence-goodwill-goodwill".

5.4 Trust between Adopter and Specialist

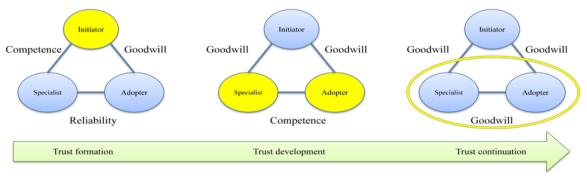
The relationship between adopters and specialists is similar to contractual relationship. Trust is originally built on the contract stating roles, responsibilities, cost, IP issues. However, the introduction of initiators makes the relationship more reliable than pure contract. During trust development, adopters and specialists learn from each other, contributing each specialty such as designing skills, marketing, and software technique. Competence make partners rely on each other. After the project, the good performance brings long-term friendship. Goodwill trust becomes the base for future collaboration. The path can be described as "reliability-competence-goodwill". Altogether, the inter-firm trust activities can be summarized as Table 6, as a combination from cases.

Relationship	Trust formation	Trust development	Trust continuation
Initiator-adopter	 Help adopters to find specialists Provide industrial invent Develop personal informal relationship with adopters Help adopter to develop public image 	 Invite adopters to join the platform, and contribute knowledge actively Provide information, community and help to promote products 	 Support adopters with more network Help adopters to go international Long-term personal interaction
Initiator-specialist	 Assess specialists based on its previous collaboration and relationship with initiators Look at specialists' performance from its tract record on big projects both domestic and international 	- Encourage the team with frequent communication - Invite specialists to join, to contribute technique	 Though the project, build further personal relationship with specialists Help to promote the image of specialists Help specialists to grow bigger, and to become an adopter (OEM) Introducing new resource to specialists
Adopter-specialist	 Assess partners based on its relationship with initiators Contract indicating responsibilities and group-based goals 	 Specialists invest new hardware facility, learn software technique Depend on each other's specialty Co-learning of marketing, risk management and sharing knowledge 	 Joint learning program in the long term Informal personal relationship development

Table 6 Trust Activities between Initiator and Adopter

5.5 The Evolution of Trust with BE

To combine the role of each organization and inter-organizational trusting relationship, a growth path can be generated as Figure 1.



 $Figure \ 1 \quad The \ Development \ of \ Trust \ with \ BE$

In trust formation stage, initiator offer goodwill trust with adopter. Initiator also introduce specialist based on its competence. Contract is built to secure the relationship between adopter and specialist. At this stage, initiator takes the fundamental role, and can be viewed as the strongest part in the BE.

In trust development stage, initiator offer goodwill to adopter and specialist. The competence trust has gradually replace contract based trust between adopter and specialist. At this stage, the relationship between adopter and specialist is the key part of BE.

In trust continuation stage, initiator offer goodwill to adopter and specialist. Goodwill trust is also developed between adopter and specialist. As adopter and specialist become closer, the new alliance can be viewed as a new initiator of adopter. It began to extend existing system towards the establishing of a new BE. At his stage, the close alliance between adopter and specialist is the key part of BE.

On the whole, the process began with reliability, then competence, and finally goodwill. It is consistent with the model of "reliability-competence-goodwill". Especially the relationship between adopter and specialist follows this path.

In the long run, as the BE became stable, goodwill is extremely important in China. Two things can account for this. First, the animation game industry is at the early stage in China. Particularly many organizations and project are supported by government. With the policy focusing on nurturing and helping, companies emphasize on good intention towards each other. Also, to trace back to the Chinese culture, family and collectivism is highlighted. Rather than fulfill individual responsibility, Chinese culture prefer teamwork and sharing, this will impact on the generating of common goal, knowledge sharing and contribution in Chinese companies

6. Conclusion

This paper discusses trust issues in BE, by looking at collaborations in current Chinese animation industry. Trust is studied from the inter-firm relationship following the stages of trust formation, trust development and trust continuation. It contributes to the theory of trust and business network. Three main findings are highlighted:

- Different roles and functions of initiator, adopter and specialist
- Process of inter-firm trust between initiator and adopter, between initiator and specialist, and between adopter and specialist
 - Evolution model of trust along with BE development

From practice perspective, it provides a way to differentiate company roles, and to view the business network from ecosystem perspective. This view is particularly important in a new emerging industry when the supply chain is not mature or the products are not clearly defined yet. Chinese animation industry set a good example of the interaction between companies, policy makers and other participates.

There are some limitations of this research, as the limited number of cases (3 cases) in one industry based in one country may not be comprehensive. More intensive cases are needed to enrich the current findings. Also there is some uniqueness of Chinese companies, as they highlight teamwork, relationship and long-term common goal. It may not be similar to BE in other countries. The impact of culture on different patterns trust in BE can also be one of the future directions.

References:

Den Hartigh E. and Van Asseldok T. (2004). "Business ecosystems: A research framework for investigating the relation between network structure, firm strategy, and the pattern of innovation diffusion", in: ECON 2004 Annual Meeting.

- Eisenegger M. (2010). "Trust and reputation in the age of globalization", in: Klewes J., & Wreschniok R. (Eds.), *Reputation Capital:* Building and Maintaining Trust in the 21st Century, Germany: Springer.
- Eisenhardt K. M. (1989). "Building theories from case study research", Academy of Management Review, Vol. 14, No. 4.
- Ferrin D., Dirks K. and Shah P. (2006). "Direct and indirect effects of third-party relationships on interpersonal trust", *Journal of Applied Psychology*, Vol. 91, No. 4.
- Gabarro J. (1978). "The development of trust, influence and expectations", in: Anthony Athos & John J. Gabarro (Eds.), *Interpersonal Behavior*, Englewood Cliffs: Prentice Hall.
- Ganesan S. (1994). "The making of a successful global supply chain", World Trade, Vol. 17, No. 12, pp. 19-22.
- Handfield R. (2003). "Can you trust the trust in supply chain relationships? Supply chain resource consortium (SCRC)", available online at: http://scm.ncsu.edu/public/hot/apics031101.html.
- Iansiti M. and Levien R. (2002). *The New Operational Dynamics of Business Ecosystems: Implications for Policy, Operations and Technology Strategy*, Cambridge: Harvard Business School Working Paper, pp. 1-113.
- Iyer B., Lee C. H. and Venkatraman N. (2006). "Managing in a small world ecosystem: Some lessons from the software sector", *California Management Review*, Vol. 48, No. 3.
- Jap and Anderson (2007). "Testing a life-cycle theory of cooperative inteorganizational relationships", *Management Science*, Vol. 53, No. 2
- Krishnan R, Martin X. and Noorderhaven N. (2006). "When does trust matter to alliance performance?", *Academy of Management Journal*, Vol. 49, No. 5.
- Mayer R. C., Davis J. H. and Schoorman F. F. (1995). "An integrative model of organizational trust", *Academy of Management Review*, Vol. 20, pp. 709-734.
- McAlister D. J. (1995). "Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations", *Academy of Management Journal*, Vol. 38, No. 1, pp. 24-59.
- Moore J. F. (1996). *The Death of Competition: Leadership and Strategy in the Age of Business Ecosystems* (1st ed.), New York, NY: Harper Business.
- Rempel J. K., Holmes J. G. and Zanna M. P. (1985). "Trust in close relationships", *Journal of Personality and Social Psychology*, Vol. 49, pp. 95-112.
- Platts J. and Tomasevic V. (2004). "Developing productive relationships in the construction industry", in: *Practising Philosophy of Management Management Philosophers Conference*.
- Robson M., Katsikeas C. and Bello D. (2008). "Drivers and performance outcomes of trust in international strategic alliance: The role of organizational complexity", *Organization Science*, Vol. 19, No. 4, July–August.
- Sako M. (1992). Prices, Quality and Trust: Inter-firm Relations in Britain and Japan, Cambridge: Cambridge University Press.
- Williamson O. and Ouchi W. (1981). "The markets and hierarchies program of research: Origins, implications, prospects", in: Joyce and Van de Ven, *Organizational Design*, New York: Wiley.
- Yin R. K. (1994). Case Study Research Design and Methods, Beverly Hills, CA: Sage publications.