Cultural facts to support innovation in business dyads– focus on risk-taking

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ABSTRACT

A culturesupporting innovative behavior can be a strategic capabilitythat generates a sustainable competitive advantage in a dyad relationship if it promotesrisk taking and innovations. The actors of a dyad relationship need to create a culture that promotes risk-taking in order to support innovations and new businesses opportunities. The avoidance of the risk-taking with new innovations can lead to strategic simplicity.Practices that functioned well previously are used unceasinglydespite of the strategic requirements. The topic related to risk taking and innovation culture in the business networks is scantly studied in the literature. Therefore, this paper concentrated more on the studying concepts and creation of the classification method starting from a dyad-relationship.

INTRODUCTION

The importance of the creating innovative culture is discussed by several scholars: For example, Van de Ven (1986) discusses about the importance of an institutional leadership in order to establish a culture milieu that brings up innovation and forms structures that enable creative thinking. According to Van De Ven, the creation of an innovative culture can be formed through four factors: organization's mission, embodying purpose into the organization's structure and systems, defending the institution's integrity, and ordering internal conflict.Argyris and Schön(1996) discuss about importance to understand the value of double-loop learning in creating innovative culture in a company: debating, communicating and conflicting are leading to the reconsideration of existing rules, norms and values, and thus bring the innovation forward. Institutional leadership implies creating a climate for innovation through plainness in goals, rules and mission, but accepting the uncertainty and tension that is promoting a creative and innovative behavior. The uncertainty in this context could mean that there is possibility of having risk.

The importance of risk taking as a part of the innovation culture is discussed also by several scholars: Organizational culture can be a strategic resource that generates a sustainable competitive advantage by promoting learning, risk taking, and innovation (Zahra, 2004). Based on the literature review the owner-managers need to create culture that welcome and promotes calculated risk-taking (Zahra, 2005; Bass and Aviola, 1993). The avoidance of the risk-taking can lead to strategic simplicity: routines that worked well in the past are used again and again regardless of the strategic challenges (Zahra, 2004). In the literature it is highlighted the importance of the need of the entrepreneurial culture in large enterprises (Drucker, 1985).

The creation of an innovation culture across companies' borders supporting innovative behavior related to risk taking has not been discussed widely in the literature: Powel et al. (1996) discuss about the meaning of the organizational learning in the business networks but they hardly mention how the risk should be considered; Björk and Magnusson (2009) conclude about the importance of thenetwork connectivity for the quality of the innovation, but risks topics related to new innovations in the business networks are not discussed. This study tried to gain further understanding on the topic by conducting a conceptual study based on the short case examples from different sources.

As risk taking is considered to be an important part of the entrepreneurship and innovative behavior in the companies, this paper tries find out how this topic should be further discussed in the business networks' context. In this phase of our study, we would like to gain understanding first how the risk taking is visible in dyad relationships, before extending thestudy to the business networks. The research questions of this present paper are as follows: what are the concepts that are needed to knowrelated to the present topic in the future research studies? How can dyad relationships be classified related to risk taking? And what would be the future studies?

This paper has work-in-progress status. It is inspired by the literature studies on innovations and risk taking cultures and by a study of Gosselin-Bauwen (2006) on strategic account management. This paper works on creating a synthesis based on these previous studieswhich could be applied in the business networks. This study is limited to the dyad relationship. Fisrt we enlight the topic through examples and then we focus on how the case can be analyzed.

Finally we will discuss about how the topic can be linked to IMP studies and what could be the future studies.

CASES

The first case example: MarjaKurki is a company that produces scarves and ties from silk for consumers. Its sales today exceed30 million euros coming from businesses in Europe, China and Korea. Ms. MarjaKurki who has created a company by her name described in a TV show the start of her carrier as entrepreneur about 30 years ago. At that time she had strong vision of the need of the colorful western style silk clothes. The vision turned out to be innovative business model. For her first design she needed to important silk fabrics from China. She was not able to get a small quantity of a silk fabric in order to produce test products. Instead she needed to order a large amount of the silk fabric which would have caused her company to go in solvency if failures had occurred with the market entry.

The story described how the start-up company needed to take a risk before entering the market. However, it told also about the relationship with a Chinese silk fabric manufacturer. The manufacturer was not ready to take risks with a new buyer representing a new innovative business model at that time. It can be concluded that the supplier was risk averted. The customer instead was ready to take a risk and, therefore, the customer was risk favored. This dyad relationship can be called 'captive relationship'or 'customer risk-taking driven relationship' because you might not have any real alternatives - either you enter the market with your own risk or you do not take the risk at all.

The second case example: Following two examples are related rather to the use of technology. Nevertheless, they give an overview on how the related risks were dealt with. Nokia Siemens Networks is a multinational company established 2007 from Nokia Networks and Siemens Communication. A supplier of Nokia Siemens Networks proposed to use its system that was developed for IT shopping for granting guest visitors' access to internet. The actual innovative idea proposal was further enhanced by copying a concept used by Nokia.However, Nokia Siemens Networks' IT was unwilling to take a risk letting third party users to access to internet although its risk was considered minimal. The IT considered that there were possibilities to misuse the free access although similar concepts were available for example in internet cafes.

In this case the customer was finally unwilling to take a risk to apply the solution that was developed. The customer can be regarded as risk averted what comes to the implementation of this kind of new solutions although there wasalready a good reference. This kind of dyad relationship can be called ´'Supplier risk taking driven relationship'. In an extreme case the customer could use its position to squeeze extra benefits or information out the supplier without any intention for cooperation.

The third case example: Another example from Nokia Siemens Networks was generated through joint innovation campaign with one of its IT supplier. One of the ideas was to create cross-organizational chat functionality to easy day-to-day communications between the customer and its supplier in the question. A successful implementation was finally achieved incrementally with using ideas and ideas coming both side of the organization.In this case both parties were ready to renew the way they operate and were ready to take a risk related to the new technologies. This kind of dyad relationships can be called 'business opportunities driven relationship' or 'opportunities driven relationship'.

The fourth example: In the mid-1970s the Finnish Broadcasting company, YLE was building a new radio house in Helsinki, Finland. JuhaniBorenius, who then worked for YLE as an acoustician, asked his friends, IlpoMartikainen and TopiPartanen, at a postgraduate acoustics seminar if they could design and make an active monitoring speaker. It was already known that Martikainen had designed loud speakers and stereos. First, the two coming founders, Martikainen and Partanen, of Genelec, nowadays a world-wide known professional active monitoring speaker manufacturer from Iisalmi, Finland, what it was and then, two weeks later they had the first prototype sample. The prototype was far from the perfect speaker but promising enough to raise serious interest within YLE and elsewhere. In the early 1978 after two years of thorough R&D work in co-operation with YLE the first speaker was ready. At the same time the company for manufacturing was founded. In April 1978 YLE made an order of 340 speakers from Genelec. YLE paid one third of the purchasing price when the order was placed: However, YLE required bank collateral for the prepayment from Genelec. (Genelec 2008:11-13, interview with IlpoMartikainen, June 20th, 2012).

In this case both parties were willing to invest into the relationship and the risks were shared. YLE co-operated with the Genelec after a prototype was introduced and also took a risk by ordering the speakers. Martikainen and Partaanen started the co-operation without knowing if any orders would be introduced by YLE.Genlec was establihed just before the order was introduced.

The fifth example: In the 1950's Pilkington, a UK based flat glass manufacturer, developed a new method for manufacturing high quality flat glass to replace plate glass. The difficulties and costs in the production of plate glass were well known in the industry. The fixed capital costs of electric motors and machinery were enormous. The running costs were also considerable. The plate glass line was also noisy and it provided a lot of dirty grinding powder. According to Pilkington one of their problems was to sell big amounts of float glass to save money and test acceptance without premature fuss. On this Pilkington approached some of their good customers and, with the help of Triplex Safety Glass, Pilkington gradually introduced float glass into safety glass without anyone knowing the difference. The float glass process was announced to the world in January 1959. "One thing we were good was security," said Sir Alastair Pilkington, the inventor of float glass. "People easily fail to understand that the greatest secret about a new process is not how to do it, but it can be done". The process was a complete surprise to the industry.(Uusitalo, 1995).

The market entry risk was minimized since the new material was tested in silence. If the test had failed, it would have informed thatthe ordinary glass process had problems and that the problems had been fixed by now.

The sixth example case: The cholesterol-lowering effect of plant sterols was known as early as the 1950s, and since that time scientists all over the world have studied plant sterols and their properties. In the late 1980s Raisio, a small Finnish food manufacturerdeveloped with the help of a Finnish professor a manufacturing process to turn plant sterol into fat-soluble stanol ester suitable for food production.In 1993 the manufacturing process was developed. The findings of three years clinical stanol ester study were published a prestige scientific journal in 1995. At the same time the first product, Benecol margarine, was launched in Finland. Soon expectations for Benecol grew. The Times wrote about Mr Wester as "the man whose pot of gold could save millions of lives". The limited production capacity of the raw material was a bottle neck. In spring 1997 Raisio was overwhelmed with co-operation offers coming from all over the world. The company was in doubt about whose offer they may accept.International press followed Raisio and Benecol very intensively.In 1997-98,

Raisiosigned an agreement with the US based Johnson & Johnson group first for North America and then worldwide.Johnson and Johnson is the world's biggest producer of health-related products with a turnover of $22 billion in 1996 and 170 operative companies in 50 countriesThe company got the sole right to use the Benecol trademark and patents on the global markets. Raisio kept the entire production of raw material in its own hands and developed the Benecol production and marketing in Finland and neighbouring areas.Raisio's business model of licensing Benecol included 1) a modest lump sum, 2) royalty and 3) the revenue of the sold ingredient. In 1998-1999 Raisio built plants in Finland, Chile and the US to supply enough raw materials. Global marketing took place by a strong and skilful partner. Johnson & Johnson introduced the first products in spring 1999, one year later than planned. Later on the world wide agreement was cancelled. Johnson and Johnson takes care of only certain markets. Raisio has taken responsibility of many markets and it co-operates directly with food manufacturers.

In this case the supplier, the company Raisio, took all the financial risks with expectations of high revenues. The customer Johnson and Johnson need not share risks because one sidedlicensing agreement was proposed to Johnson and Johnson by Raisio. Probably Raisiobelievedin the power the new invention, Benecol, after it got vast amount of publicity.

The seventhexample case: VR and Fiat Ferroviaria: In Italy, various possibilities for fast trains were explored. The first working prototype (christened Pendolino) using a tilting carbody was introduced by FiatFerroviaria in 1969. A whole EMU (Electric Multiple Unit) with four cars was built in 1975. The train was more or less travelling laboratory for the new technology. In the 1980s acquired patents for the tilting bogie and other improvements led to the more advanced ETR 450, the first Pendolino to enter regular service.ETR 450 with an 8-car configurationcould run at speeds up to 250 km/h. In 1993 the ETR 460 began service.Its bogie-to-body connection was extremely simple and easy to make, with clear advantages for maintenance. For safety and comfort reasons, maximum tilt was 8°.ETR 460 keeps thank to aluminiumextrusion technology axle load to an extremely low level to allow the train to take curves up to 35% faster than conventional trains in ordinary rails.However, ETR 460 was built in only 10 units. A total of 34 EMUs of the ETR 460/470/480 series were built by Fiat Ferroviaria until it was sold to the French Alstom in 2000.

By 1990 VR Group, at the time the Finnish State Railways, decided to acquire fast trains. In 1992 it bought two proto units and had an option for 16 more units. The Finnish model, Pendolino 220, is based on the ETR 460 but was adapted to the specific requirements of VR Group and to the cold climatic conditions. The first two units were assembled in 1995 by Rautaruukki-Transtech. Eight units were purchased from Fiat in 1997 and in 2002 eight additional from Alstom. All units were delivered between 2000 and 2006.The trains are composed of six carriages. The train has a maximum speed of 220 km/h.Pendolinos in Finland have received a lot of bad will for their reliability issues, mostly caused by technical problems with the tilting system and couplers. Allunits will go through an extensive maintenance cycle between2012 and 2014, which will include changes to the couplers and the tilting system to make the train more reliable.

Speed trains usually needs new rails like in TGV's case. However, Pendolino was one of the scare trains that did not need new rails: Fiat Ferroviaria was basically the sole supplier of such trains.The other possible train supplier could have been ABB. The Finnish Railways, VR, was in the situation that it needed to acquire fast trains and it took a risk to buy Pendlinos based on ET460 that was still a prototype. In this case, the customer carried the risks and the supplier minimized its risks.

The eight example case: could include situation, where none of the actors of the dyad relationship are willing to propose new business models or enhancement in the current relationship. This kind relationship can be called transactional.

CONCEPTS, VARIABLES AND ANALYSIS

The purpose is now to describe the concepts as well the key related variables for classification of dyad relationship. All seven various real examples are employed to gain deeper understanding of the concepts and to create of the classification systems.

The first concept as well the related variable concerns the customer's readiness to take risks in a dyad relationship. In the first case the customer, the company MarjaKurki, was ready to take a significant risk and thus it can be said that its risk taking readiness was high.In the second case, the customer was unwilling to take a risk and thus the company risk taking readiness was low in this case. This variable can be called Customer Risk Taking Readiness (CCR). It can be argue that in the partnership mode in which the trust is expected to be in place, the customer risk taking is higher. Therefore, it can be argued that the CCR is partnership driven.

The second concept as well as the related variable concern supplier's readiness to take risks in a dyad relationship. In the sixth case, the supplier, the company Raisio, was ready to risk and to pay all related cost, and, therefore, the risk taking readiness of Raisio can be regarded high. In the first case, MarjaKurki's supplier was not ready to take any risks, and therefore, the supplier's readiness to take risk was low.This variable can be called Supplier Risk taking Readiness. (SRR).The driver for the risk taking capability of the supplier could be the business opportunity available. If the opportunity can be regarded high, the more willing the supplier is to take risks.

The intersection of these two variables describesa dyad relationship's risk-taking capability (DRRC). The classification of the relationships is described Table 1. With the help of the variables fourfold table can be formed as described in the Figure 1. The fourfold table includes following quadrants: Transactional Relationship describes the cases in which neither of the parties is willing to take risk. Supplier Risk Taking Driven Relationship describes that only the supplier in a dyad relationship will take risks. Customer Risk Taking Driven Relationship means that the risks are more or less solely by a customer. Business Opportunities Driven Relationship means that the risks are shared in the dyad relationship.

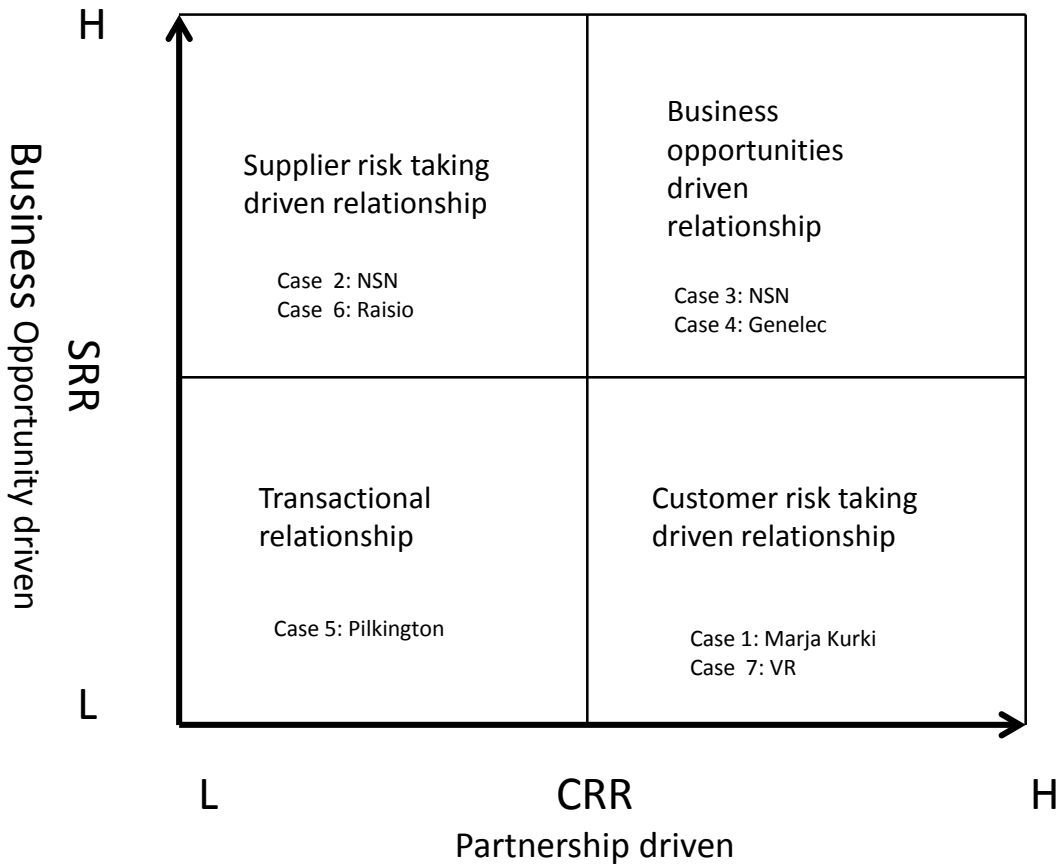

Figure 1: Fourfold table to classify the dyad relationship readiness for risk taking

Further analysis based on fourfold table

It can be discussed how the companies can make their strategic movements based on their own status and their relationship status with a supplier. Basically the unstable situations exist in the up-left corner and the low-right corner. The unstable situations represent possible business discontinue points. The possible options that companies can do in these cases are as follows and listed below. The optionsare for the down-right corneras follows:

1. As in MarjaKurkicompany case, companies can accept the situation and just to take an extra risk of facing in solvency. This means that there is no immediate change is a dyad relationship.In long run, the relationship can be turn to be transactional.
2. The other option is to end the existing dyad relationship with the supplier in the question and to find a new supplier with which the mutual risk-taking relationship can be built. In this case the switching costs are needed to be considered.
3. One of the options is to try increase relationship building effort in order to reach of sharing mutual benefits if the risk taking is needed to consider.

In case that the supplier is willing to take risks but customer is not the options could be following:

1. The supplier can terminate the trial to build a partnership with the existing customer and search a new customer.
2. The supplier can try to further negotiate and invest in the relationship with supplier to gain an improved position.
3. The supplier can accept the situation and not search further new opportunities.

DISCUSSION AND FURTHER STUDIES

According to Håkansson (1987), innovation is interplay of knowledge between the actors, ability to apply that knowledge in practice and using the knowledge by mobilizing resources and coordinating these resources between actors with an efficient combination of firm specific technological capabilities. However, taking risk and sharing risk can be quite important part of the innovation process. Håkansson's(1987) definition of the innovation does not describe how the companies agree the employment of these resources and capabilities which can include taking risk alone or by sharing it. In general, in Industrial Marketing and Purchasing group the focus of the studies have been on how acquire, manage and develop technologies within the framework of permanent business relationships (for example, Ford et al. 2002). We would like to propose that the innovation definitions should also have an element concerning capabilities of taking risks, sharing them and agreeing related profits in a business network in the question. A good example of this is a risk sharing in a business networks is a situation in which the companies agree about the fair share from the market price for each other that is used in a Japanese Keiratsu model. The other option is that every actor adds its own costs on the top of others' costs and, thus, outprices the innovation from the market.

Risk taking readiness can be related to informal and formal cooperation. Informal cooperation is based on trust developed through social exchange. This can be attained only over time where the parties experience that the other party is trustable. In case the both parties trust each other, risks can be assumed to be shared more easily than without having the trust. In informal cooperation business comes first and visibility later - if it comes - whereas in formal cooperation, visibility comes first and business later - if trust can be developed. Formal cooperation does not always lead to real cooperation, and real cooperation is often not visible. Informal cooperation is developed by those who are directly involved in the business exchanges between companies, such as line managers at the middle organization level. Formal cooperation, on the contrary, is usually established at higher management level (Håkansson and Johanson 1990). In formal cooperation the parties are interested in illustrating the presence or intended presence for the counterpart. The question can be raised if the risk sharing is also difficult in a formal relationship and if the formal relationships focused solely to minimize the risks. The messages of formal cooperation can also be directed at competitors ("this market is nothing for you"), suppliers ("supply us; we are the leaders") or suppliers of complementary products ("our system are worth developing"). Similar remarks can be intended for other stakeholders. Informal cooperation is used when the parties are interested in business with the counterpart's network without visibility, which may prevent potential moves by competitors. Companies with a strong position usually use

formal cooperation while companies with less strong position seek informal cooperation. Seek of the strong position can lead that counter party take all the risks.

Webster (1992) discussed about the range of a marketing relationship. He divides the evolution of the relationship into seven phases. It would be interesting to study ifthe risk taking would be any effect on the speed of the evolution of the relationship from Markets and Transactions phase to Buyer-Seller Partnership phase as described by Webster. Figure 1 might also describe the maturity of the relationship, for example, in the early phase the relationship is transactional as also Webster describes. The present study also further contributes on discussions on the development buyer-seller relationship (Ford, 1980). One of the variables related to development of the relationship concerns uncertainty in the relationship: the uncertaintyindicates that either seller or buyer or both onesneed to take risks in order to advance in the relationship.

A previous study (Ruokolainen, 2008) on start-up technology companies propose that start-up technology companies form a significant risk for their customers if they deliver complex products to use in the business-to-business market. Start-up technology companies employ usually their existing relationships to find their first customers. This observation could generalize that in overall the exiting relationship can be used for gaining mutual commitment in case that a risk is needed to be taken.

Previous studies propose that managers in established companies are risk averse while the entrepreneurs are risk takers and innovators (Busenitz and Barney 1997). Based on that results it a study could be conducted to know whether business networks consisted mainly from big companies differ from the networks consisted from small companies in risk taking. In other words, can it be concluded that entrepreneurs who have networked with each other produce more innovative solutions than their counter parties in the large enterprises?Drucker (1985) states although many of the major innovations have not come from the big companies, the big companies have still had a significant role in developing technologies. The big companies might have tendencies for more formal cooperation than SMEs: it might mean that the networks consisting from small companies are more innovative.

As Zahra (2006) proposes that the incompetence in risk taking can lead to the strategic simplicity. The future studies can also concentrate to understand on qualitative studies how the risk taking culture affect profits of the companies in the different categories proposed in Table 1. Do those dyad relationships that rely on mutual business opportunities produce more sustainable incomes in the companies than the others in the quadrant?

The concepts and the analysis method proposed here needs further investigations and development. Definitely it is important to understand how the risk taking relating to innovation can be further studied systematically in business networks.

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