

The Trade-off of Effect and Efficiency in the Value Creation via Business Network

Work-in-Progress Paper

Wang, Yi-jen

Associate Professor

University of Marketing and Distribution Science

3-1 Gakuen Nishimachi, Nishi-ku

#651-2188, Kobe, Japan

yi_jen_wang@red.umds.ac.jp

Abstract

In the B2B researches, the importance of value creation via business network has been claimed increasingly. As a result, the relationship patterns among industrial companies have been insight theoretical and empirical. On the other hand, many researches have contributed their outputs for developing the determinants that affect performance. However there is a gap between the theory and practices.

The purpose of this paper is to discuss the gap of business relationship building between the theory and practice by a case study on Japanese convenience store chain operation. And by this discussion we hope to have an insight into the application of social network theory on the B2B research.

No matter in academic researches or business practices, the importance of business relationship had been stressed. However business relationship is a means to achieve the goals, so that it must be considered strategically. And when considering business relationship as a strategic means, building and keeping business relationships are not the only purpose anymore. Sometimes changes within the business relationships are necessary. However, lots of previous researches had focused on how to build and keep steady business relationships than on the changes. The main reason bases on the transaction cost reduction. But transaction cost is not the only cost in the business relationship. This difference caused the gap between theories and practices. Reduce the transaction cost is a kind of efficiency chasing idea. On the contrary,

Therefore, the research question here is “why the trade-off of effect and efficiency on the value creation occurs”. In order to reach this goal, we try to refer the social network theory to explain the mechanism. The concepts we plan to use here are “structural holes”, “redundancy” and “economy of scale”.

There are 2 theoretical implications from this paper. 1) By the case study, we offered the financial data to outline how the trade-off relation between effect and efficiency is. And we focused on a distribution company that will enrich the coverage of IMP researches. 2) In the stream of IMP researches, “position” and “resources sharing” are two main concepts for analysis. However, when using business relationship as a competition strategy, the cost aspect is also important. Here we gave an analysis on the

cost aspect. That is the other contribution to the theory from this paper.

And the implication to practice is to remind the industrial company managers to pay attentions on the cost aspect when build or extend the business relationships. Especially, as a competition strategy, relationship building or extension is not the only aim. Considering the operational aspect is also necessary, because there is a trade-off relation between chasing effect and efficiency.

Keywords: Value creation, Trade-off of effect and efficiency, Structural holes, Redundancy, Economy of scale

Introduction

The purpose of this paper is to discuss the gap of business relationship building between the theory and practice by a case study on Japanese convenience store chain operations. And by this discussion we hope to have an insight into the application of social network theory on the B2B research.

No matter in academic researches or business practices, the importance of business relationship had been stressed. However business relationship is a means to achieve the goals, so that it must be considered strategically. And when considering business relationship as a strategic means, building and keeping are not the only purpose anymore. Sometimes changes within business relationships are necessary. However, lots of previous researches had focused on how to build and keep business relationships steady than on the changes. That brought a gap between the theories and practices.

Why changes are necessary? That is because there is a trade-off relation between effect and efficiency chasing. Therefore, the research question here is “why the trade-off of effect and efficiency on the value creation occurs”. In order to reach this goal, we try to refer the social network theory to explain the mechanism. The concepts we plan to use here are “structural holes”, “redundancy” and “economy of scale”.

In the next section, we will have a brief literature review to make sure the position of this paper in the research stream. Then we will introduce the case of Lawson, one of Japanese CVS chains. And after the case study, we will have a further discussion on the points and summarized the findings and conclusion.

Literatures Review

Business relationship or business network are key words in the industrial researches for long. Because the researchers believed building a good business relationship or joining to a good network can reduce the exchange costs, create values, and also improve the competitive advantages. In order to support these ideas many researches had been developed.

The first movement in this field is from the transaction cost analysis that refers a steady business relationship (e.g vertical integration) can reduce the transaction costs. This view point started from Williamson (1979, 1981, 1985) and been extended by

other researchers latterly.

In the transaction cost analysis, the exchange cost reduction is the key concept. In other words, how to increase the efficiency of exchange is the concern of this paradigm. On the other hand, how to improve the effects by business relationships is the next hot topic in the B2B researches. Morgan, R. M. and Hunt, S. (1999) had an overview on the use of relationship marketing as a strategy to increase the competitive advantages. Also according to the relationship life cycle, Eggert, A., Ulaga, W., and Schultz, F. (2005) had developed a conceptual framework for the value creation. While the business became internationalized and globalized, researchers extended the relationship concept to network to explain the world wide business connections. For example, Holm, D. B., Eriksson, K. and Johanson, J. (1999) had discussed the possibility of value creation through a world wide business network.

Goodman, L. E. and Dion, P. A. (2001), had discussed the determinants that influence the distributor-manufacturer relationship. They found “product salability”, “ease of sale”, “idiosyncratic investments”, “effective communications”, “anticipation of trust” , “manufacturer’s strengths” and “dependence & power” are factors influence commitment. Kumar V., Bohling, T. R., and Ladda, R. N. (2003), and Jacob, F. (2005) discussed the business relationships from a customer’s perception view point. That is, while the customer company perceived good images on the supplier, the products and the service, it intends to join the relationship and keeps in. This high commitment brought higher performance.

On the other hand, new product development is a tool to create value for competitive advantages. In the B2B researches the role that supplier plays and the relationship between suppliers and customers had been discussed. For example, Fliess S. and Becker, U (2005) claimed a strategic new product development model that the processes leaded by supplier.

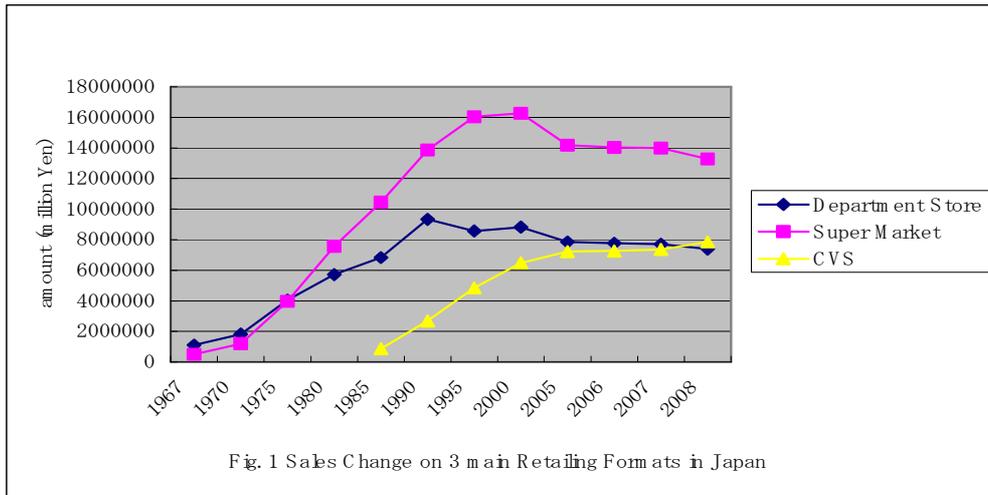
Above is just a small part of literatures review in the B2B researches. From this small sample of literatures, we can find how business relationship had been emphasized. And checking the contents of these previous researches, we can find two types of discussions from them. One focused on the transaction cost reducing. And the other put the concerns on the value creation. In other words, there are two types of research concerns, one is on how to improve the efficiency of business practices by business relationships, and the other is on how to improve the effect of business practices by business relationships. However, these two types of researches had been developed separately. That is the reason why the gap between practices and theories occurred. Actually efficiency and effect can hardly coexist. They are in a trade-off relation. However, there is an order, in which these two concepts appear in turn. It is not hard to understand, by seeing this on a “going concern” view point. That is, chasing efficiency may cause a shortage of effect. This shortage brings the motivation to improve the effect, vice versa. They are interdependent on time series.

The position of this paper in the research stream is to connect these two types of researches together. In the next section we will introduce the case to explain.

The Case

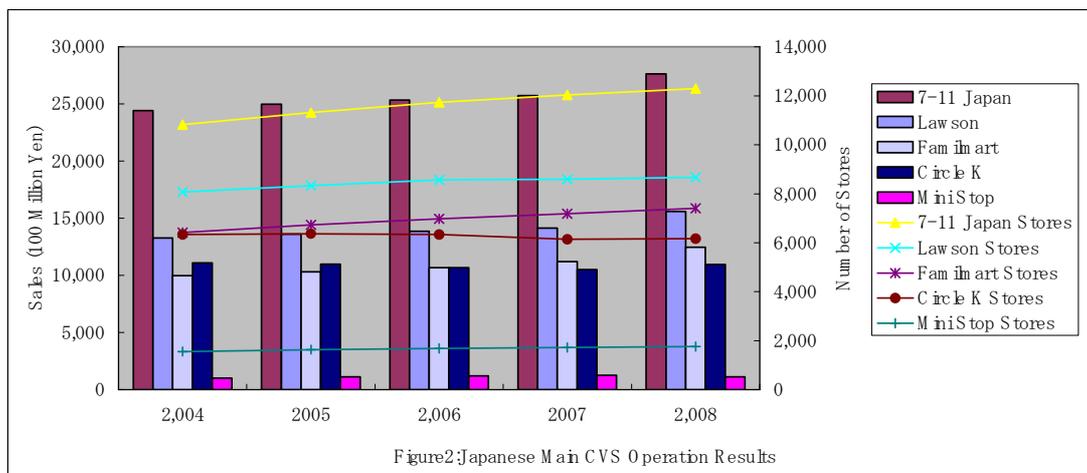
In this section, we will introduce the strategic challenges of Lawson, one of Japanese CVS chains, as the case to explain the trade-off relation between the effect and efficiency chasing on the business practices.

Figure 1 refers to the change of sales amount on 3 main retailing formats in Japan chronologically. From this figure we can find, the sales amount of CVS keeps increasing till now. However the force had been slowed down since 2000.



(Source: Japan chain store association, Japan department store association, Japan franchise chain association)

Figure 2 shows the sales and number of stores of 5 main Japanese CVS chains. From this figure, we can find there is a gap between the top and the other CVS chains. And we also can find the operating results and the number of stores did not change dramatically.



(Source: annual report of each CVS chain summarized by author)

From figure 1 and 2, we can find the growth of CVS format in Japanese retailing market has matured. The market shares of each chain were kept in a good balance.

In Japan, CVS is a retailing format that targeted on the young male customers. However, in such a kind of market condition, Lawson, the No.2 CVS company has tried to make changes since Aug, 2006. In short, Lawson had developed 3 new store formats from the original one to adapt to the different types of customers. The names of those new formats are “Lawson Store 100”, “Natural Lawson”, and “Lawson Plus”. Table 1 has summarized the differences among these formats.

Table 1 the comparison of Lawson store formats

Format type	Original	Lawson Store 100	Natural Lawson	Lawson Plus
Target	20-30's male	Senior and house wives	20-30's working female and healthy oriented customers	Adapt to all customers by the area character
Assortment	Snacks, Beverages, Daily goods, Lunch boxes	Private Labels (Snacks, Beverages, Daily goods,) Perishables	Organic food, Supplements, Healthy Lunch boxes	Mixes of above
Price Zone	Fixed price	One coin price	Premium price	Mixes of above
Overlapping on original assortment	-	About 60%	About 10%	-

(Source: Lawson annual report 2009, summarized by author)

The aim that Lawson made these changes is to extend the coverage of targets. Contrary to the aggressive efforts of Lawson, 7-11 Japan adhered to its original format till now. The change of operating revenues and operating income from 2005 to 2008 on the top 3 CVS chains are shown in Table 2.

Table 2 the change of operating revenues and income on 3 CVS chains (million yen)

	2005	2006	2007	2008
7-11 Operating Revenues	2015236	2249648	2395701	2308690
7-11 Operating Income	209815	206,090	201,032	213,367
Lawson Operating Revenues	268058	283053	301177	349476
Lawson Operating Income	43867	44513	46610	49186
Familmart Operating Revenues	276442	287849	319439	287342
Familmart Operating Income	32661	29608	31214	36532

(Source: annual report of each chain, summarized by author)

And Table 3 shows the operating cost of these CVS chains.

Table 3 the change of operating costs on 3 CVS chains (million yen)

Operating costs	2005	2006	2007	2008
7-11	1805421	2043558	2194669	2095323
Lawson	224191	238540	254567	300290
Familmart	243781	258241	288225	250810

(Source: annual report of each chain, summarized by author)

From Table 3 we can find, the operating costs of Lawson kept increasing during 2005-2008, especially the cost in 2007 to 2008 is 2.8 times over the cost in 2006 to 2007. No need to say, how to reduce the operating cost is the next challenge of Lawson.

Discussion

Checking the case introduced above, there are 2 questions worth us to think. They are, why Lawson has to extend its store formats, and why the operating costs of Lawson keep increasing.

According to Lawson annual report 2009, the reason why Lawson tried to extend new store formats is to change the original format to adapt to the customers' needs by a multi-segmented way. By matching assortments to new segmentations to increase the perception of service quality and to improve the performance is the aim. Doubtlessly, by this store format extension to distinguish itself from the other CVS chains is the strategic purpose.

The factors that drove Japanese CVS to success had been discussed. In short, they are standardized store operation formats and efficient backyard functions. In the former, product display and zoning, product choosing, frequency of product checking and fill-up are the typical factors. In the latter, the efficient logistics system and the order systems are the representative factors. However, all the know-how had almost been shared among Japanese CVS chains. So that, except the location and the original products, there are no difference among the stores.

Review the history of CVS development in Japan, we can find it is a process of chasing efficiency and differentiation on the operations in turns. Saying briefly, at the first, as a retailer CVS sells national labeled products in a new way (e.g 24hours operation, shortest distance). Selling national labeled products is an efficient way to run a business, but it makes no difference among stores. In order to differentiate one from another, the headquarters of each CVS chain had tried to develop its own original products. But CVS companies had no manufacture function, so that they have to find their partners to produce the original products for them. A partnership with manufacturers may differentiate CVS chains, but it also denied part of efficiency on CVS operation.

CVS had been developed in Japan for over 30 years that the operation know-how had been standardized again. This standardized condition forces Lawson to make changes. However, checking Table 2 we can find, even the revenues increased by the format extension, the profits did not increase in the same rate. As we had checked above (see Table 3), the operating costs increased 2.8 times after the store formats extension. The considerable reason is the format extension forces Lawson to challenge something not familiar. And this challenging denied some efficiency in the ordinary operations. About this point, we will have a further discussion at the next paragraph.

Before the format extension, Lawson ran CVS business only. But after format extension, because “Lawson store 100” sells perishables, the knowledge about perishables handling is necessary. And also perishables will increase operating cost on order frequency, transportation, and waste. From Table 1 we can find, even 3 store formats had been developed, there are overlapping on the assortments among formats. The rate of overlapping between “Lawson store 100” and the original one is about 60%. And the rate between “Natural Lawson” and the original one is about 10%. Here we may say, the assortment overlapping is the way Lawson tried to absorb part of the operating costs.

Referring the social network theory that claimed by Burt (1995) to this case, we can explain those questions mentioned above. About the first question, the reason why Lawson tried to extend new store formats is by format extension Lawson can find the “structural hole” to create value. What is “structural hole”? According to Burt, it is “the separation between nonredundant contacts (Burt 1995, p.18)”. Saying this in our words, structural hole is a weak connection between two networks. In the structural hole, information is not redundant that can offer a chance to create value. For example, Lawson runs CVS that it knows the operations well. And Lawson can apply this know-how to deal with perishables. However perishables are different to the assortment that Lawson used to deal with. This difference brings Lawson the chance to learn the new know-how to deal both of these products. The challenge to deal with perishables is the weak linkage between CVS and supermarket operations. And the new business that mixed CVS with supermarket is the structural hole.

On the contrary, the reason why the know-how sharing weakened the competitive advantages is information redundancy. What is “information redundancy”? It refers to a condition in which the same information had been shared. In the social network context, information redundancy brings high efficiency of communication. People talk in the same language and using the same words. However, sharing the same information causes the lack of creativity.

Link both of these ideas, we can say because of the information redundancy, not only Lawson but also all the other CVS chain companies lost their own competitive advantage, at least it is hard to differentiate one from another. So that Lawson tried to find out the structural hole to break the balanced condition.

The second question is why the operating cost keeps increasing in the observation period? Referring to the Burt’s idea, one of the reasons is the non-redundancy of

information. In Burt's analysis, information redundancy brings high efficiency of network. That meant the cost of network operation reduced by information redundancy. However, the structural hole exists on the non-redundancy, so that the efficiency of network is lower and the operating cost is higher relatively on the structural hole. Furthermore, we would like to remind the other reason that influences the operating cost. That is economy of scale. In the network theory, the key factor is information. Different to the physical factors, information is the factor that without economy of scale. However, when apply network theory to the business relationship research context we have to pay some attention on the factor. That is because business relationship is not funded on information only. As we had mentioned in the Lawson case, even the new store formats had been developed, some of the assortments have to be shared among them. That is because there is an economy of scale on the assortments.

To sum up, why the operating cost rose? The reasons are partly from the non-redundancy of information (unfamiliar to the know-how of dealing with perishables) and partly from the bad economy of scale.

Findings

From the discussions above, we can point out our findings as followings.

Firstly, by the case study, we had proved the gap between the business relationship theory and the practice. As the previous researches had claimed, business relationship is necessary and important. However business relationship building or extension is not the only aspect on the practices. As we had checked in the case, after the relationship had been built and extended there is an adjustment (e.g. assortment overlapping) to make the relationship runs efficiently and strategically. That is because of the trade-off relation between the effect and efficiency chasing on the value creation.

In generally, value exists in the different networks or groups. So if we want to create value we have to make difference to the condition we involved. However as we had discussed above, making difference is a behavior to reduce the similarity. So that, we earn effect but lose efficiency. On the contrary, familiarity brings us the efficiency, but routine works limit the creativity.

From this view point, the mechanism of the trade-off relation is the dynamism of settling and changing on the business relationship. Settle down to a business relationship will bring high efficiency of operation. That is like the transaction cost analysis had explained. However, a steady business relationship may offset the effect of differentiation, weaken the competitive advantages. On the contrary, in order to make differentiation or increase the competitive advantage, building a new connection with other company or brings changes into the existed relationship is necessary. However, the changes on the business relationship reduce the efficiency of operation. Both of these two aspects are not existed separately. They are interdependent. That is chasing efficiency brings the necessary to chase effect and vice versa.

Why the trade-off relation occurs in the value creation process? That is because of

the information redundancy and the economy of scale on the physical aspect of business relationships. In addition to Burt's "information redundancy", we had found "the economy of scale" as the other factor that may influence the trade-off mechanism. This is the second finding of this paper.

Conclusion

From these findings, there are 2 theoretical implications from this paper. 1) By the case study, we offered the financial data to outline how the trade-off relation between effect and efficiency is. And we focused on a distribution company that will enrich the coverage of IMP researches. 2) In the stream of IMP researches, "position" and "resources sharing" are two main concepts for analysis. However, when using business relationship as a competition strategy, the cost aspect is also important. Here we gave an analysis on the cost aspect. That is the other contribution to the theory from this paper. In the meantime, when applying social network theory into industrial business research, a critical view point is necessary. By the case study, we pointed out the factor beside information and gave a critical idea to the previous researches that claimed the importance of relationship building.

And the implication to practice is to remind the industrial company managers to pay attention on the cost aspect when build or extend the business relationships. Especially, as a competition strategy, relationship building or extension is not the only aim. Considering the operational aspect is also necessary, because there is a trade-off relation between chasing effect and efficiency.

The theoretical implications offered a view point that links the previous researches focused on efficiency and value creation separately. And the implication to practice notices the industrial company managers to check the problem they faced and adjust the business relationship strategically.

Limitation and the theme for the further research

Finally, we would like to point out the limitation of this WIP paper. That is how to generalize the findings. We believe that the trade-off relation of effect and efficiency chasing exists in every industry. We had found the Japanese CVS case, but how are the conditions in the other countries and industries. So that collecting more data and cases is the theme for the further research.

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