

# Factors Influencing the Decision to Join Non-Retail Franchise Business with an Application to Ready-mixed Concrete Industry in Thailand

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## Abstract

There are limited academic papers studied on the non-retail franchise business. The lesson learned from ready-mixed concrete franchise business model in Thailand, the business format franchise, is chosen to be the case study because of special characteristic along the supply chain. Two key factors in influencing the decision are identified 1) PUSH factors (uncontrollable factors) are negative factors pushing potential franchisees to join the network aiming for being competitive in the market 2) PULL factors (controllable factors) are positive factors attracting potential franchisees to join the franchise network to increase competitiveness. This paper aims to study the influencing of PUSH and PULL factors to potential franchisees in making the decision to join non-retail franchise network. The research hypotheses formulated were tested by questionnaire with Likert scale 1-5 distributed to franchisees. The initial step in the analysis of the data collected uses item-total correlation and the Cronbach's alpha coefficient. The model fit testing is analyzed by mean score from the SPSS statistical package.

From the analysis result, PUSH and PULL factors have influence in the decision to join ready-mixed concrete franchise network. In comparison, the result shows that PULL factors have higher influence in the decision than PUSH factors. Hence the franchisor has an advantage because the PULL factors are under franchisor control.

The result gives an advantage to the management in understanding the factors which influence the decision to join the non-retail franchise network and can apply and in develop business models for other non-retail franchise businesses.

**Keywords:** Franchise, Ready-mixed concrete, Non-retail business, PUSH factors, PULL factors

## **Introduction**

The ready-mixed concrete business in Thailand is oversupply and with reference to the report from the Department of Industrial Work (DIW) of Thailand under the Ministry of industry in 2009 showed that there was more than 1,000 ready-mixed concrete plants operating all over Thailand. Ready-mixed concrete producers in Thailand can be categorized into two groups. Those in the first group are owned by the cement producing companies through vertical integration. Those in the second group are the independent ready-mixed concrete players who buy cement raw material from the cement producers and process ready-mixed concrete for sale in the local markets. Large numbers of small independent ready-mixed concrete players lead to the high competition in ready-mixed concrete market from 2 major conditions; market oversupply and high market fragmentation. So, while cement producers strive to expand their market share, market consolidation is another key strategy to be aware of aiming to reduce the level of market competition. Some years ago, the franchise business model was taken into consideration for ready-mixed concrete market expansion because franchising business model can be answered for the two aforementioned strategies; market share expansion and market consolidation by migrating independent ready-mixed concrete producers to be members of ready-mixed concrete franchise network. The first ready-mixed concrete franchise network in Thailand is CPAC, the market leader in ready-mixed concrete market and subsidiary of Siam Cement Group who is a conglomerate company and cement market leader in Thailand, was started the ready-mixed concrete franchise business in the year of 2000. The franchise business is growing impressively and numbers of CPAC franchisee in 2010 was reaching 130-140 franchisees with impressive business performances. The second ready-mixed concrete franchise network in Thailand is INSEE Concrete, the subsidiary of Siam City Cement Public Company Limited who is a member of world cement supplier, HOLCIM group of Switzerland. INSEE Concrete and INSEE Cement, both are the second players in ready-mixed concrete market and cement market respectively. INSEE Concrete started its ready-mixed concrete franchise business in 2006 to securing the cement channel, avoiding the market lock-out risk and aiming for rapid market share expansion in ready-mixed concrete market with low capital investment. Number of INSEE ready-mixed concrete franchisee was reached 60 franchisees in 2010. Currently both CPAC and INSEE Concrete are still successfully running ready-mixed concrete franchise business proving from increasing number of ready-mixed concrete franchisees and the growth in ready-mixed market share. As a key strategy, ready-mixed concrete franchise business can help expanding market share in ready-mixed concrete market, consolidating the ready-mixed concrete market and securing cement channel with lower capital investment and faster expansion comparing to own investment through vertical integration.

## **Literature Review**

Ready-mixed concrete is an important building material that is widely used today in the construction industry (Anson et al., 2002; Wang et al., 2001). Tommelein and Li (1999) define the “Nature of Concrete” as

- Concrete is perishable material – once water has been added to the mix of dry materials, concrete only has a mere hour and a half or so (unless retarders are used) before the hydration process will form a gel.
- Concrete is a Custom Specified Material – Designers, usually civil/structural engineers, perform the structural calculations for a project determine the strength and other quality requirement for concrete.
- Availability of Ingredients – While finding a suitable mix recipe may be easy, a batch plant may not stock all aggregate types or admixtures in quantity or at all.

From the study of Tommelein and Li (1999), it concludes the factors that effect to the ready-mixed concrete production system along the supply chain consisting of batching capacity, delivery capacity, demand fluctuation, order quantity accuracy, contractor ordering and time of delivery, delivery cycle and location, placement size and total quantity ordered of a special mix. From these special characteristics which are different from retail businesses, ready-mixed concrete business can be defined as a non-retail business.

As aforementioned, the ready-mixed concrete market in Thailand is in the fierce competition from the oversupply condition with number of ready-mixed concrete producers locate scattering over the country. Johnson (2010) said that whenever the basis of competition shifts to customization, convenience, or fully to cost, the customers' job-to-be-done change in fundamental way and business model innovation often comes into play. From Johnson (2010), the franchising model, as an innovation for non-retail businesses, is considered from the franchisors, cement suppliers, as the tool for market expansion in the ready-mixed concrete market where cost is the key competitive factor while it strikes the right balance among own investment operation (vertical integration), franchising (virtual integration), and independent ready-mixed concrete customers. Saleh and Kleiner (2005) said that franchising is one of the most popular and successful strategies for business to enter new market and expand operations. The ready-mixed concrete franchise in Thailand is business format franchise which Hoffman and Prebles (1993) explained the business format franchise in the way that franchisees replicate in their local community an entire business concept, including product or service, trade name and methods of operation". While Boyle (1999) said that to ensure success for this type of franchise system, the terms of business format franchise contracts are particularly stringent which is supported by the study of Rubin (1978) which stated that control by the franchisor may extend over products sold, price, hours of operation, condition of the plant, inventory, insurance, personnel and accounting and auditing.

In developing the ready-mixed concrete franchise network, there are two points of view franchisor and franchisee points of view. For franchisor point of view, franchisor deals mainly with the area selection and territory allocation. The two major criteria; level of market sophistication and market attractiveness generating four strategic market; Oil Well, Green Field, Plantation and Plateau (Sirichalermpong and Chansa-ngavej, 2011). Focusing to the franchisee point of view, factors influencing the decision to join franchising network, Sorenson and Sorensen (2001) said that franchisee chooses to purchase substantial strategic and operational support for pursuing these opportunities from the franchisor. Wang et. al

(2006) said that virtual integration can help achieve low cost advantage in term of efficient resource utilization in supply chain operation and with seamless information channels connected to suppliers, thus a high level of supply chain visibility, it can be easily to track variable in production, product quality, inventory level and delivery capability. While Bruno (1984) suggested that the major elements attracting to join franchise network are: Allocating Territories and Other Geographical Considerations and Franchise Sales Presentation. Another important feature in many modern franchise contracts is the presence of brand name capital (Klein, 1980; Klein and Leffler, 1981).

From all the above academic papers, they support that there are positive and negative forces which influence the decision of potential franchisees in making decision to join or not to join the ready-mixed concrete franchise network. The negative forces or pushing forces are called PUSH factors and positive forces or pulling forces are called PULL factors.

### **Factors Influencing the Decision to Join Ready-Mixed Concrete Franchise Network**

As aforementioned the ready-mixed concrete market is a high competition market, the survival has to be competitive in an uncertainty environment. Searching for the best partner is a solution in developing and increasing for potential ready-mixed franchisee's competitiveness. The uncertainty environment can be defined as the PUSH factors pushing the ready-mixed concrete players to find a good business partner who can help developing and increasing competitiveness while PULL factors is the selling points of the selected partner and in the case of franchising, it is the franchisor's attraction through franchisor expertise, know-how and support. This situation leads to the decision to join ready-mixed concrete franchising network which PUSH factors and PULL factors (stick and carrot) are considered as major factors (See figure 1).

**1) Factors influencing the decision to join ready-mixed concrete franchise network;** PUSH factors and PULL factors. These factors play different yet important roles to the potential ready-mixed concrete franchisee, potential franchisee, in making decision to join or not to join the franchise network. (See figure 1).

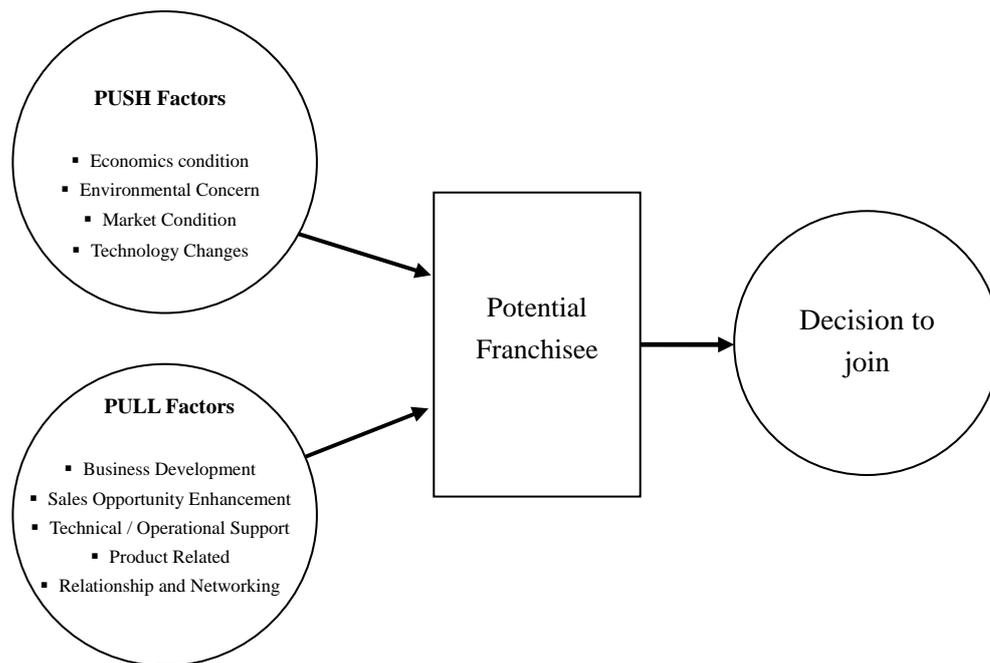


Figure 1. Factors influencing the decision to join ready-mixed concrete network framework

▪ **PUSH Factors** as a negative factors that pushing potential franchisees to join franchise network are including

- Economics condition such as pressure from economics downturn, inflation rate, interest rate, oil price, etc.
- Environmental condition such as environmental regulation, global warming concern, community alert on environmental issue, etc.
- Market conditions such as market demand fluctuation, price sensitive condition, high competition level, special requirement and needs, etc.
- Technology changes such as change in construction technology, change in ready-mixed concrete technology, change in transportation technology, new product innovation, etc.

▪ **PULL Factors** as a positive factors that motivating or attracting potential franchisee to join franchise network are including

- Business development such as business start-up support, assess to sales channel, easier loan granting, sourcing of raw material supplier, sourcing of truck contractors, etc.
- Sales opportunity enhancement such as the right to use well-known brand, national exposure, opportunity to get high specification projects, etc.
- Technical/operational support such as plant establishment support, plant operation support, business processes support, managing the truck fleet, etc.

- Product related such as product quality improvement, product variety, product innovation, etc.
- Relationship and networking such as joining franchise network, enhancing relationship with franchisor, consultative availability, network with bodies along the supply chain, etc.

Understanding the influence of PUSH factors and PULL factors to the potential franchisee in making the decision whether to join or not to join the ready-mixed concrete franchise network, will lead to the development of the right business model for other non-retail franchise businesses.

## **Research Design and Study Methodology**

### **1) Questionnaire design**

The questionnaire survey sought CPAC and INSEE Concrete franchisee opinions on the “Factors supporting non-retail franchise business”. A dual languages ten-page questionnaire, accompanied by a covering letter, was sent to the owner of the samples. The questionnaire was divided into seven sections which the first 2 parts are exploring factors influencing the decision to join the ready-mixed concrete franchise network; PUSH factors and PULL factors respectively. The questions are grouped into economics condition, environmental concern, market condition and technology changes for PUSH factors and business development, sales opportunity enhancement, technical/operational support, product related and relationship and networking for PULL factors. Each factor is consisted of at least 3 questions to ensure the reliability and consistency of the result. In each section of the questionnaire using Likert scale with ‘5’ indicating ‘Strongly Agree’, ‘4’ indicating ‘Agree’, ‘3’ indicating ‘Neutral’, ‘2’ indicating ‘Disagree’ and ‘1’ indicating ‘Strongly Disagree’. Each question is designed to be straight forward such as “Pressure from economics downturn has an influence on the decision to join ready-mixed concrete franchise network.”, “Plant establishment support has an influence on the decision to join ready-mixed concrete franchise network.”, etc. The questionnaire was pre-tested to the management team of INSEE Concrete franchisor. As a result of the pre-test, some wordings and sequence in the questionnaire were improved and ready for distribution.

### **2) Sample design and distribution**

The purpose of the research is to explore the relationships of the PUSH factors and PULL factors in the decision to join ready-mixed concrete franchise network. Therefore, the appropriate subjects to complete the questionnaires should ideally be the owner, the high level management or at least at the manager levels who have experienced during the decision in joining the ready-mixed concrete franchise network.

The questionnaire was sent to all 180 franchisees which 130 franchisees are CPAC and 50 franchisees are INSEE Concrete by postal mail. In response to the initial 180 questionnaires issued, 62 replies were received after a four-week period. From the list of 138 franchisees that had not replied, a random selection of 30 franchisees was made a reminder call. Overall, 73 positive replies were received, which was approximately 40% response rate. The survey

cannot be considered biased following Moser and Kalton (1971), who hold that the results of a postal survey are biased if the return rate is lower than the range 30% - 40%.

### Data Analysis and Results

The preliminary stage of data analysis involves an examination of descriptive statistics and frequency distribution of each variable included in this study in order to initially explore the survey findings and to inspect whether there is a variation in the responses. The next stage is to assess the reliability of the measures through item-total correlation, Cronbach's coefficient. The latter stage is to test the research hypotheses H1 and H2 through the mean score of each factor. The reliability testing and data analysis were performed by using the statistical package for social sciences (SPSS) version 14.0.

H1: PUSH Factors which are Economics Condition, Environmental Concern, Market Condition and Technology Changes have relationships with the decision to join ready-mixed concrete franchise network

H2: PULL Factors which are Business Development, Sales Opportunity Enhancement, Technical/Operational Support, product Related and Relationship and Networking have relationships with the decision to join ready-mixed concrete franchise network

In table 1 presents the results of the frequency distribution of the responding franchisee. There are 41 respondents, 57%, from CPAC franchisee and 31 respondents, 43%, from INSEE Concrete Franchisee.

Table 1. Frequency distribution for the responding franchisees

Brand	Frequency	%
CPAC	41	57%
INSEE	31	43%
Total	72	100%

### Reliability assessment results

Table 2 and 3 show Cronbach's coefficient of PUSH factors and PULL factors. The Cronbach's alpha coefficient is used for reliability assessment whether the repeated measurements of the same construct in the questionnaire are consistent, in a highly correlated manner (Hair et al., 2006). The questionnaire elements consist of PUSH factors and PULL factors and the questions of each factor are also shown in the same table. The Cronbach's coefficient alpha is accepted at minimum of 0.70, while the item-total correlation is accepted at 0.4 (Nunnally and Bernstein, 1994; Chareonsuk and Chansa-ngavej, 2009). The results of all the questions in PUSH factors are found to be consistent and reliable because the item-total correlations are all above 0.4 while Cronbach's alpha of each factor, economics condition, environmental concern, market condition and technology changes are 0.883, 0.886,

0.820 and 0.957 which are all above 0.7. For PULL factors, most of the questions are also found to be consistent and reliable except for the 2 items in the business development (business start up support and access to new channel) which have item-total correlation lower than the set criteria of 0.4 (0.256 and 0.184 respectively). The Cronbach's alpha for PULL factors are mostly found to be above 0.7 which are 0.735, 0.729, 0.936 and 0.829 for sales opportunity enhancement, technical/operational support, product related and relationship and networking respectively. Except for business development, the Cronbach's alpha is 0.428 which is below the set criteria, so business development was removed from the model. Therefore, on the basis of these preliminary analyses, each item contributes well to the model and is statistically reliable.

Table 2. Cronbach's coefficient of PUSH Factors

<b>PUSH Factors</b>	<b>Cronbach's alpha</b>	<b>Questions of each factor</b>	<b>Corrected Item-Total Correlation</b>
<u>Economics Condition</u>	0.883	Pressure from economics downturn Pressure from inflation rate Pressure from interest rate Pressure from fuel price Pressure from exchange rate	0.501 0.817 0.772 0.781 0.767
<u>Environmental Concern</u>	0.886	Environment regulation Global warming Community alert on environmental	0.796 0.820 0.732
<u>Market Condition</u>	0.820	Demand fluctuation Price sensitive High competition	0.550 0.782 0.740
<u>Technology Changes</u>	0.957	Change in construction technology Change in RMX technology RMX Innovation	0.874 0.957 0.902

Table 3. Cronbach's coefficient of PULL Factors

<b>PULL Factors</b>	<b>Cronbach's alpha</b>	<b>Questions of each factor</b>	<b>Corrected Item-Total Correlation</b>
<u>Business Development</u>	0.428	Business start up support Access to new channel Easier loan granting	0.256 0.184 0.422
<u>Sales Opportunity Enhancement</u>	0.735	The right to use brand To become a national player Opportunity to get high specification	0.448 0.703 0.547
<u>Technical/Operational Support</u>	0.729	Plant establishment support Plant operation support Business processes support	0.402 0.656 0.651
<u>Product Related</u> N of Items Cronbach's Alpha	0.936	Product quality improvement Product variety Product Innovation	0.899 0.895 0.814
<u>Relationship and Networking</u>	0.821	Joining franchise network Enhancement relationship with franchisor Consultative availability	0.551 0.730 0.786

Hypotheses testing results

The result of the analysis from all the 72 qualified respondents from both ready-mixed concrete franchise, CPAC and INSEE Concrete. The hypothesis test is conducted follows to the diagram in figure 1 by using mean score from SPSS program to analyze the result.

For PUSH factors, the mean score is at 3.511 which is higher than the Likert scale of 3.0 (Neutral) so PUSH factors have influence in the decision to join ready-mixed franchise network. Considering each factor in the PUSH factors group, we found out that technology changes has the highest mean score of 4.0648 or has the highest influence in PUSH factors following by market condition with the mean score of 3.928. For the other 2 factors; economics condition and environmental concern, the mean scores are closed to the neutral level at 3.0722 and 3.0046 respectively.

PULL factors have the mean score of 4.1192 which is higher than the Likert scale of 3.0 (Neutral) so PULL factors have influence in the decision to join ready-mixed franchise network. Considering each factor in the PULL factors group, we found out that sales opportunity enhancement, technical/operational support, product related and relationship and networking have mean scores of 4.1805, 4.1852, 4.1944 and 3.9167 respectively. Three of the four factors; sales opportunity enhancement, technical/operational support, product related, have the same mean scores which is higher than the fourth factor, relationship and networking nevertheless all PULL factors are scored higher than or closer to 4.0 which means all the PULL sub-factors have high influence in the decision to join ready-mixed franchise network.

From the analysis result, both PUSH factors and PULL factors have influence in the decision to join ready-mixed concrete franchise network. However, comparing the mean score of PUSH factors and PULL factors, the result shows that PULL factors have higher influence in the decision than PUSH factors. Hence the franchisor of ready-mixed concrete franchise network has an advantage because the factors, which have higher influent, are PULL factors which are under franchisor control.

Table 4. Mean Scores of PUSH Factors

<b>Questionnaire elements/indicators</b>	<b>Questions of each indicator</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>PUSH Factors</b>		<b>3.5111</b>	
<u>Economics Condition</u>		3.0722	
	Pressure from economics downturn	3.8472	1.08329
	Pressure from inflation rate	2.9861	1.01389
	Pressure from interest rate	3.1667	1.38401
	Pressure from fuel price	2.9583	1.38846
	Pressure from exchange rate	2.4028	1.15867
<u>Environmental Concern</u>		3.0046	
	Environment regulation	2.9444	1.28796
	Global warming	2.8056	1.10872
	Community alert on environmental	3.2639	1.12579
<u>Market Condition</u>		3.9028	
	Demand fluctuation	3.8194	1.20242
	Price sensitive	3.6667	1.28917
	High competition	4.2222	0.95272
<u>Technology Changes</u>		4.0648	
	Change in construction technology	4.0833	0.97504
	Change in RMX technology	4.1250	1.02005
	RMX innovation	3.9861	1.05474

Table 5. Mean Scores of PULL Factors

Questionnaire elements/indicators	Questions of each indicator	Mean	Std. Deviation
<b>PULL Factors</b>		<b>4.1192</b>	
<u>Sales Opportunity Enhancement</u>		4.1805	
	The right to use brand	4.4444	0.78523
	To become a national player	3.9861	0.91148
	Opportunity to get high specification	4.1111	0.81458
<u>Technical/Operational Support</u>		4.1852	
	Plant establishment support	4.0972	0.90631
	Plant operation support	4.3750	0.65944
	Business processes support	4.0833	0.81793
<u>Product Related</u>		4.1944	
	Product quality improvement	4.2500	0.88413
	Product variety	4.2222	0.87568
	Product Innovation	4.1111	0.95763
<u>Relationship and Networking</u>		3.9167	
	Joining franchise network	4.1806	0.86116
	Enhancement relationship with franchisor	3.8056	1.17052
	Consultative availability	3.7639	1.11952

## Conclusion

Ready-mixed concrete franchise can be used as the prototype for a non-retail franchise which from the study, there is clear evidence of the different business characteristics between retail and non-retail businesses franchise. PUSH factors and PULL factors (stick and carrot) were identified to be the key factors influencing potential franchisees in making decision to join ready-mixed concrete franchise network. Thus the 2 key factors, PUSH and PULL, were set to be hypotheses H1 and H2 respectively.

From the study, the result found out that the hypotheses H1, PUSH factor, is accepted to be the factor which influenced the decision of potential franchisees in making the decision to join the franchise network which 2 factors in PUSH factors group; technology changes and market condition, have higher impacts than economics condition and environmental concern which are more on the neutral. For PULL factors, the result also accepts hypotheses H2 and

considering the four factors in PULL factors group; sales opportunity enhancement, technical/operational support, product related and relationship and networking, the result show high mean scores at closer and higher than 4.0. The study can conclude that the ready-mixed concrete potential franchisee is influence by the PUSH factor and PULL factor. The result also shows that potential franchisee is weighing the PULL factors higher than PUSH factors hence this can be implied that potential franchisee are attracted to join the ready-mixed franchise network more than forced to join. The interpretation is if franchisor offers the best values that meet potential franchisee needs, potential franchisee will join the network as the non-retail franchising is carrot and not stick. Therefore, from the result analysis, the ready-mixed concrete franchisor can control the key influential factors, PULL factors, which influence the decision of potential franchisees in joining the ready-mixed concrete franchise network. The top management of other non-retail businesses can also used the result of the key factors in this study in setting up franchise business model to attract potential franchisee to join the franchise network and understanding the key external forces influencing the decision to join the non-retail franchise network by using pull factor and push factor as the frame work respectively. The study can be developed for further study to find the success factors of the post joining phase which driving the ready-mixed concrete franchise network. In the same time, the study can be applied as a framework in developing business models for other non-retail franchise businesses such as waste management, recycle business, etc.

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