



MARKETING STRATEGIES AND DIRECTION OF "COTTO TILES"
UNDER AFTA IMPACT

by

Mr. Phrap Phungrasamee

A Final Report of the Six-Credit Course
CE 6998 - CE 6999 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
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ABSTRACT

ASEAN Free Trade Area (AFTA) is the agreement between 6 original countries in ASEAN, Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand, and 4 new members, Vietnam, Laos, Myanmar and Cambodia. The objective of AFTA is to increase ASEAN's competitive edge for this region and stimulate the intra-region trade by eliminate the tariffs and non-tariff barriers among the members. The original 6 members agreed to reduce tariff to 0-5% by 2000, and complete the 100% of items in the Inclusion List would have tariffs of 0-5% by year 2002.

For new members, they shall maximize their tariff lines between 0-5% by 2003 for Vietnam and 2005 for Laos and Myanmar 2006, and expand the number of tariff lines in the 0% category by 2006 for Vietnam and by 2008 for Laos and Myanmar.

Ceramic tiles also included in the 15 fast track items which the tariff will be reduced to 0-5% within 7 year (by 1 January 2000) The normal tariff of the ceramic tiles both glazed and unglazed ceramic tile are at 80% but reducing to now only 5% for ASEAN members. This will attract the foreign manufacturer to penetrated the market the lower cost and increase the domestic competitions. Only the domestic capacity is much higher than the demand, so this reduced tariff will increase the strong competition for the industry both domestic manufacturers and foreign producers.

AT the same time, the agreement on AFTA gives the opportunity for the domestic exporter to expand the market to AFTA members with the cheaper cost and can expand the market internationally.

Thai Ceramic Co., Ltd is one of the leading ceramic tile manufacturers in Thailand that face the problems and the opportunities of AFTA agreement. The company has to adopt the management policies, technologies and marketing activities to protect the market share in domestic, that still be number one, and try to penetrate more

in the international market, especially in the ASEAN countries to be the leading tile manufacturer in the world.

This report will show you the regulation of AFTA and the effect with the ceramic tile industry, the information of the ceramic tile, factors, and the marketing activities that Thai Ceramic Co., Ltd will adopt in order to adopt itself to survive in the industry and be the leading company in the world.



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I. INTRODUCTION

In year 2003, the ASEAN Free Trade Area (AFTA) will revoke limitation on export items, including ceramic tiles. The manufacturer countries will be forced to cut the average product cost to their products. ASEAN countries will pay the same FOB (free on board) price by 2002. AFTA is to be launched with the import tax only 0%-5% in year 2003 by original six members (Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand) with the later deadlines for Cambodia, Laos, Myanmar, and Vietnam.

This is both opportunities and threats for the Cotto tiles; AFTA provides the opportunities for the international market to export more in the competitive price. In another way, cause of decreased import tax the company have to beware of the import tiles that will be imported from ASEAN countries, which will penetrate the domestic market in the lower price also, especially Vietnam and Indonesia which have the large capacity and acceptable product quality This is the challenge of the company to plan and implement marketing strategies to cope with the AFTA agreement to reserve the number one of domestic market and expand to other countries to increase sales and build brand image to the global market and still be the leader in Thailand and be the world class ceramic tiles in the near future.

1.1 Research Objectives

The purpose of this research are as following:

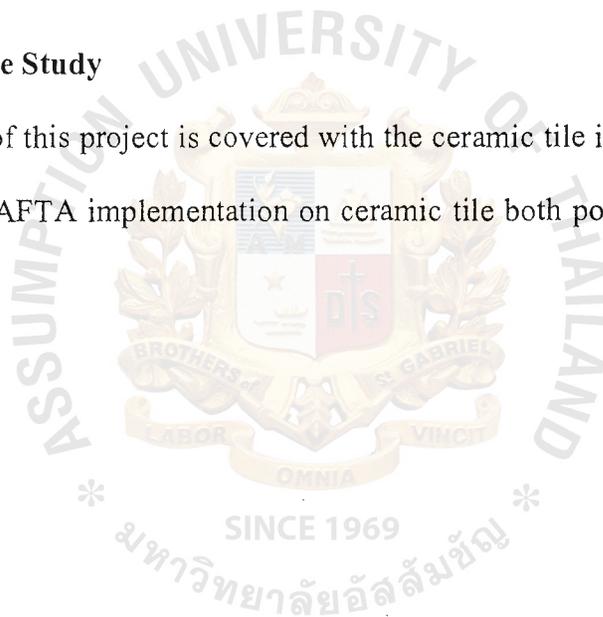
- (1) To know and analyze the present situation in the ceramic tiles industry.
- (2) To find out details of AFTA that would affect the ceramic tiles industry.
- (3) To explore marketing strategy to cope with AFTA requirement effectively.

1.2 Importance of the Study

This research is emphasized to concern about the impact of the AFTA on the ceramic tile industry. The reduced import taxes will attract the ASEAN manufacturers to export the product to Thailand. The lower cost of production from Indonesia, Malaysia, Vietnam, etc can penetrate the market with the competitive price or even lower price than the domestic manufacturers. Due to this attitude measurement can give the valuable information to prepare the right marketing plan to attract the consumers and still can reserve the market share in the domestic market and growth in the export market.

1.3 Scope of the Study

The scope of this project is covered with the ceramic tile industry in Thailand and the effect of the AFTA implementation on ceramic tile both positive and negative way to the market.



II. LITERATURE REVIEW

2.1 Company Background

Thai Ceramic Co., Ltd., ranks among the world's largest manufacturers of ceramic and mosaic tiles under the renowned "Cotto" brand, established on September 24, 1979 as a subsidiary of the Siam Cement Group. In year 1980, Siam Cement Group had bought the factory from Royal Mosaic Export Company (RMEX) and started to manage in named RMEX until year 1981, then changed to be Thai Ceramic Company Ltd. Since January 1, 1982, TCC has been one of the companies under Siam Cement Group and aimed to produce and distribute ceramic product with the high quality to satisfy the domestic and international customers.

The company was initially set up to manufacture-glazed mosaic and ceramic tiles at its sophisticated factory in Saraburi province.

In year 1983, the company produced the floor tiles "COTTO FORTE" with the technique called Double Firing

Year 1986, the company produced the floor tile with the new technique called "Single Fast Firing" and at the same time the company received the production technology called "Conventional Firing" from PIMME Company to produce the wall tile.

Advanced techniques to produce wall tile was introduced and the company bought the design to make GRANITO tiles from GAMMA DUE Company, Italy in year 1987-1989.

In year 1990, the company expanded the capacity of floor tile and mosaic tile with "Single Fast Firing" technique.

Year 1993 developed the production of wall tile to be "Double Fast Firing" and expanded the decorative tile with the "Third Firing" technique.

Year 1994, the company got the ISO 9002 for the high quality product.

Year 1995-1996, produced the Granito floor tile (Polish) and cancelled the technique “Double Long Firing”

Year 1999, got certificate of ISO 14000

Since then the company has continued to grow and to enjoy uninterrupted success. It has now capacity up to 30 million sq.m. annually. The product range has been expanded utilizing superior design and production technology from the world leading of ceramic and mosaic tiles manufacturing country such as Italy and Japan. As a result “Cotto” is known for its ability to offer the highest quality as well as customer satisfaction.

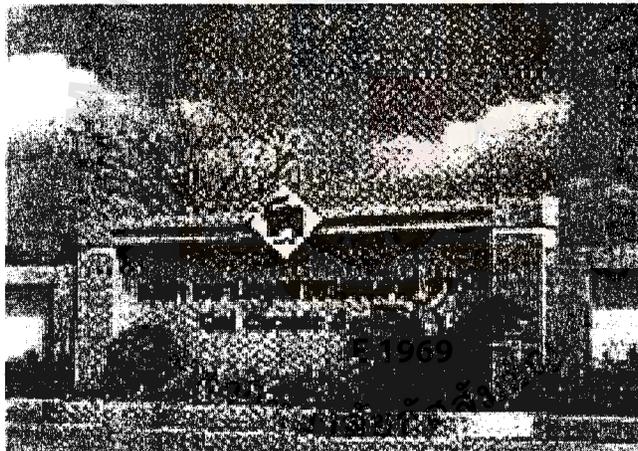


Figure 2.1. Thai Ceramic Company (Factory).

Vision

To be the world leader of ceramic tile business that earns significant return on investment required for the long-term growth.

Mission

- (1) Should be the self-development organization in technology, design, production, distribution, service, and information technology continuously.
- (2) Capable to build a brand name to be accepted and familiar in the world target customers.
- (3) To be the leaders in generating the product trend in the world and increase the sales to be in the World Class Scale.

Integrated Quality

Thai Ceramic Co., Ltd., has employed a total Quality Commitment or TQC policy for its management to put effort not only on product quality but on efficiency operation and on service excellent. Meaning maximum customer satisfaction as well.

Thai Ceramic Co., Ltd., has received the ISO 9002 certification from the Ministry of Industry's Thai Industrial Standard Institute for quality in its entire production system, from order taking and marketing through the manufacturing process itself to shipment of the finished product. Every aspect of the company's operations meets specification and competitive standard accepted by the international community.

The Company's Overall Management Policy is:

We Are Committed To Provide Quality Products And Services to Satisfy Our Customers Through The Development of Human Resource, Management System And Technology.

In satisfying this policy, Thai Ceramic Co., Ltd. pledges to:

- (1) Follow the requirements of the ISO 9002 standard.
- (2) Implement ISO14000
- (3) Provide adequate training for all staff in all areas of the company's activities.
- (4) Continuously update management strategies and improve quality levels.

- (5) Introduce advanced technology to production systems.

Production Process

Because of the company devotion to comprehensive quality each Cotto tiles is the outcome of extreme care and attention to excellent during every stage of productions. This focus on quality begins with the selection of production technology and advanced machine from the world leading of ceramic and mosaic tiles manufacturing country such as Italy and Japan and together with quality control system in accordance with international standard.



Figure 2.2. Production Process.

Exportation

“Cotto” ceramic tiles are also exported to the oversea clients thus adding to Thailand economic strength and balance of trade with the outside world. “Cotto” tiles are exported to countries worldwide such as USA, European Countries, Australia, New Zealand, Japan, Asia Countries, Middle East Countries and African Countries.

Foreign Investment

Thai Ceramic Co., Ltd. has served as spearhead by means of which The Siam Cement Group has established ceramic tiles operations through direct investment and joint ventures in Europe, North America, ASEAN and Asia.

Europe

Italy

In Italy, The Siam Cement Group invested in Floor Ceramiche, one of Italy's leading ceramic tile manufacturers and exporters.

America

USA

Tile Cera, Inc., based in Tennessee, USA., manufactures and markets ceramic floor tiles for the North American market and is the first and only ceramic tile manufacturer in the U.S. with ISO 9001 certification.

Mexico

In the Monterey, Mexico, The Siam Cement Group formed a joint venture with Lamosa Revestimentos, S.A de C.V., one of Mexico's leading ceramic tile manufacturers, to produce products complementary to those of Tile Cera.

Asia

Philippines

In Manila, Philippines, The Siam Cement Group invested in Mariwasa Manufacturing, Inc., the largest ceramic floor and wall tile producer in the Philippines.

Indonesia

In Indonesia, The Siam Cement Group has become a partner in PT Suryaragam Prima, a ceramic floor tile manufacturer based in Jakarta.

China

For the first-ever investment in China, The Siam Cement Group formed Beijing Cementhai Ceramic Co., Ltd., a joint venture with Beijing General Corporation of the Building Materials Group, to manufacture ceramic wall tiles.

2.1.1 Organization Chart

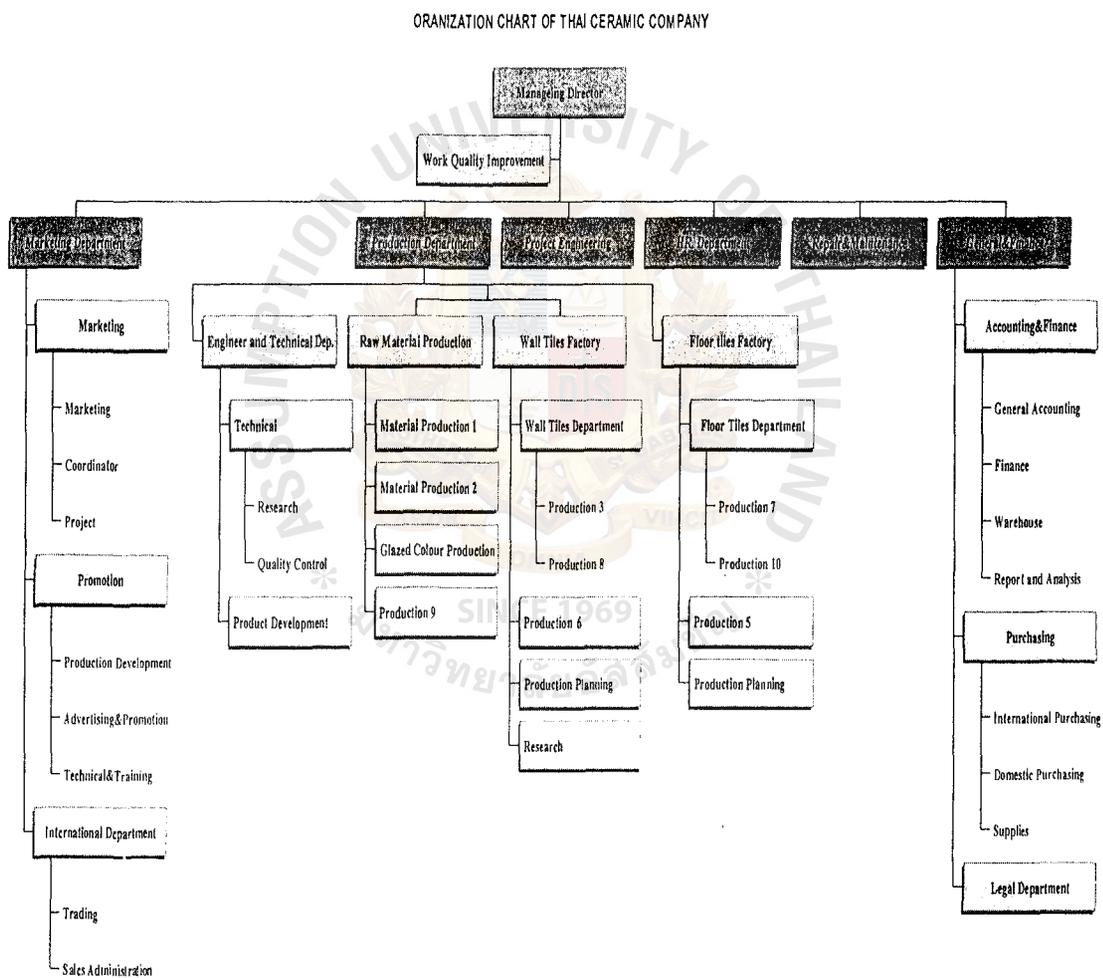


Figure 2.3. Organization Chart.

(1) Managing Director

Manage and control the management system both production and management including present the plan to the Vice President of Cementhai Group.

(2) Production

Responsible for the entire production system, design and develop new products, quality control, develop the production technology and also maintain the machines and equipments to be ready to be used effectively.

(3) Marketing

Responsible for sales both domestic and international market, promotion and advertising, also include the plan of the distribution channel both domestic and international market. Responsible for after sales service and educated the all agents for the knowledge.

(4) Finance

Responsible for the information which comes out from the accounting and financial system to use the information to make fundamental analyst. Make the budgeting plan to present management, manage the creditor and debtor. Documents and the functions that have to deal with the government department and also the export docements.

(5) Human Resource

Responsible for the acquiring the staffs and manage the compensation for the employees and set up the training program for the staffs in order to increase knowledge and efficiency

2.1.2 Product

Thai Ceramic Co., Ltd., produces several tiles collection under the “Cotto” brand. The company research development and design teams excel in the application of the most modern technology to the creation of new product design aided by technology transfer from the world leading tiles manufacturing country such as Italy. As a result “Cotto” tiles are of high quality in designing, shading and sizing. Moreover “Cotto” tiles are conformed to the ISO standard.

Cotto tiles are divided into 6 groups of product lines:

Floor Tile: Glazed Floor Tiles are produced in abroad spectrum of sizes from 150x150 mm. to 300x600mm. Plain colours and patterned designs with many surfaces to choose such as: anti-slip surface, matt surface and semi –matt surface. Apart from many surfaces, Cotto also satisfy heavy-duty needs with high PEI tiles (Abrasive Resistance).

Wall Tile: Cotto Wall Tiles have many colourful and attractive designs with nice spot and graceful border by the advanced technology of third-fired processing. Moreover, the 24K gold decorative, Lustre and Vetrosa Technique are used for elegant looks. Cotto Wall Tiles are variable in many sizes from 100x200mm. to 300x600mm.

Granito Tile: Cotto Granite Tiles feature designs deplicated from nature in a variety of colours and offer a sophisticated finish to floor and wall in distinguished homes.

Cotto Granite Tiles are variable in many sizes from 100x200mm. to 300x600mm. and size 400x400mm., polished, unpolished, clear glazed and textured. Moreover, Cotto Granite Tiles are capable of withstanding extreme weights more than 560 kg. per sq.cm.

Facing Tile: Cotto Facing Tiles add fineness to the exterior of buildings and homes. Produced in size of 50x100mm. to 100x100mm. and in various colour tones,

Cotto Facing Tiles display excellent colour retention and durability with very low water absorption.

Mosaic Tile: For a variety of outdoor and indoor walls, floors and all surfaces, Cotto produces Mosaic Tiles in a range of colours and sizes from 25x25mm. to 100x100mm. As with all Cotto Tiles, Thai Ceramic Co., Ltd. 's small –size Mosaic Tiles are easy to install, easy to clean and remain in excellent condition for many years.

Gresporcelain Tile: This is the new product to apply the granito tiles to be more design and variety. There is a glaze on the granito body that makes the tile stronger and with the pattern design.

2.1.3 Customer Target Group

- (1) House Owner: Age 25-45, Bachelor degree or higher, young men and women working for 3-5 years and think to have family. Occupations are employees, business owner, etc. Income more than 10,000 baht.
- (2) Project owner: Age more than 40, Bachelor degree or higher, have high negotiation power. Have more than 1 project
- (3) Architecture: Age 26 years old or higher with the Bachelor degree.
- (4) Contractor: Male, over 30 years old.

2.2 Ceramic Industry Overview

2.2.1 Framework of Ceramic Industry in the World Market

Ceramic of the world market can be divided by geographically into 7 major groups are

- (1) European group in EU
- (2) European group outside EU
- (3) North America Group
- (4) USA

- (5) Asia group
- (6) Africa group
- (7) Oceania group (Australia/ New Zealand)

Group of countries that is the major manufacturer is the Asia group that has the capacity about 79.8% (Asia + China) of the total capacity the entire world. The second one is European country in EU group and South America group is about 55.30% (EU+Italy+Spain) 11.3% respectively.

For the major consumption countries are Germany, USA, and France.

The Table 2.1 shows the information about the production and the import of the ceramic tile.

Table 2.1. World Manufacturing Areas.

Statistics, Trends & Building industry prospects
World Manufacturing Areas

Areas	Production 2000 (Sq./Mt.MILL)	% OF Production
European Union	1,430	30.00
Of which Italy	606	12.7
Spain	602	12.6
Other Europe (Turkey Included)	270	5.7
North America (Mexico Included)	194	4.1
Of which Brazil	428	9.0
ASIA	2,200	46.2
Of which China	1,600	33.6
Africa	125	2.6
Oceania	5	0.1
Total	4,764	100.0

Table 2.2. Ranking Imported Country 2000.

Ranking	Country	Import 2000 (Sq/Mt. Mill)
1	Germany	149
2	USA	139
3	France	89
4	U.K.	38
5	Greece	32
6	Poland	28
7	Saudi Arabia	28
8	Australia	27
9	Belgium	23
10	Holland	22

Sources: Tile Today Magazine Issue # 29 tile today. infertile.com.au.

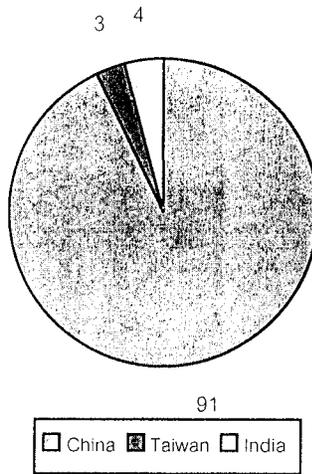
2.2.2 Ceramic Tile Industry in Asia Market

For the Asia market, the leader in production and the distribution can be divided into 2 groups

- (1) Asia countries outside Asean (Non-Asean) such as China, Taiwan, South Korea, Japan, India.
- (2) Asia countries in Asean (Asean countries) such as Thailand, Indonesia, Malaysia, etc.

NON-ASEAN Countries

Country that has the highest capacity is China, about 1600 million sq.m. per year. It is 33.6% of the world production. The second highest is Taiwan 60 million sq.m. and India about 85 million sq.m.

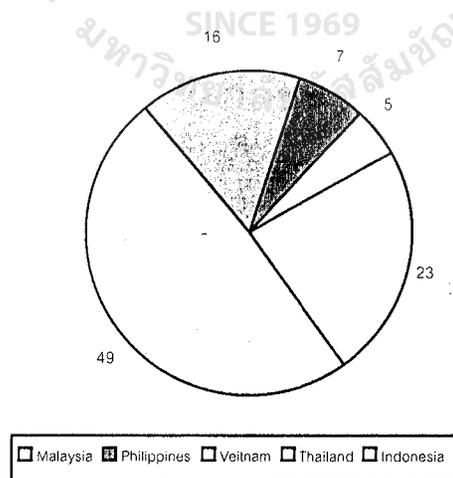


Sources: Tile today magazine Issue # 29

Figure 2.4. Asia Countries Outside Asean (Non-Asean).

ASEAN Countries

Country that has the highest capacity is Indonesia about 200 million sq.m. or 2.2% of the world production. Next country is Thailand about 100 million sq.m. and Malaysia 70 million sq.m. respectively.



Sources: Report and Planning Department Ceramic Cementhai Co., Ltd.

Figure 2.5. Asia Countries in Asean (Asean Countries)

2.2.3 The Consumption of Ceramic Tile

(1) Non-Asean countries:

If we consider the consumption rate of the ceramic tile per person per year, we will find that Taiwan has much higher consumption rate than China about 13 times. That is Taiwan's rate about 4 sq.m. while China is about 0.3 sq.m. This implies that China market has the opportunity to expand in the future.

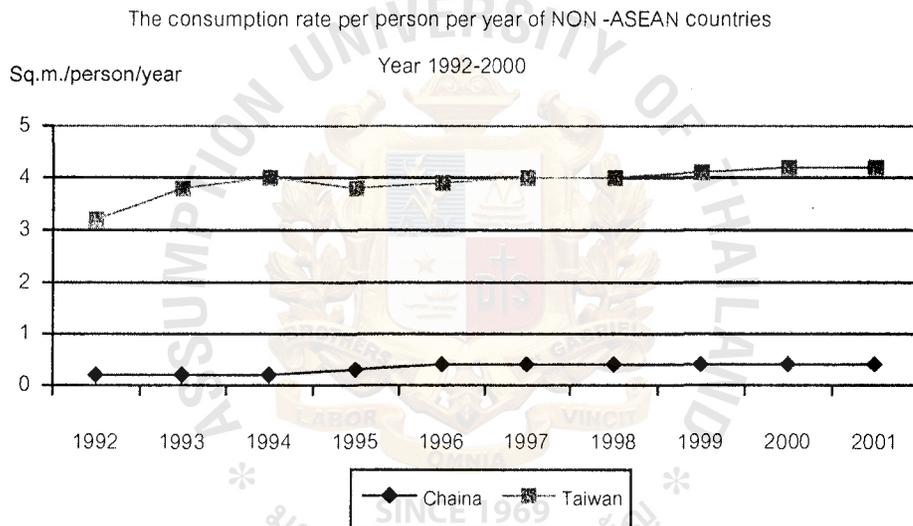
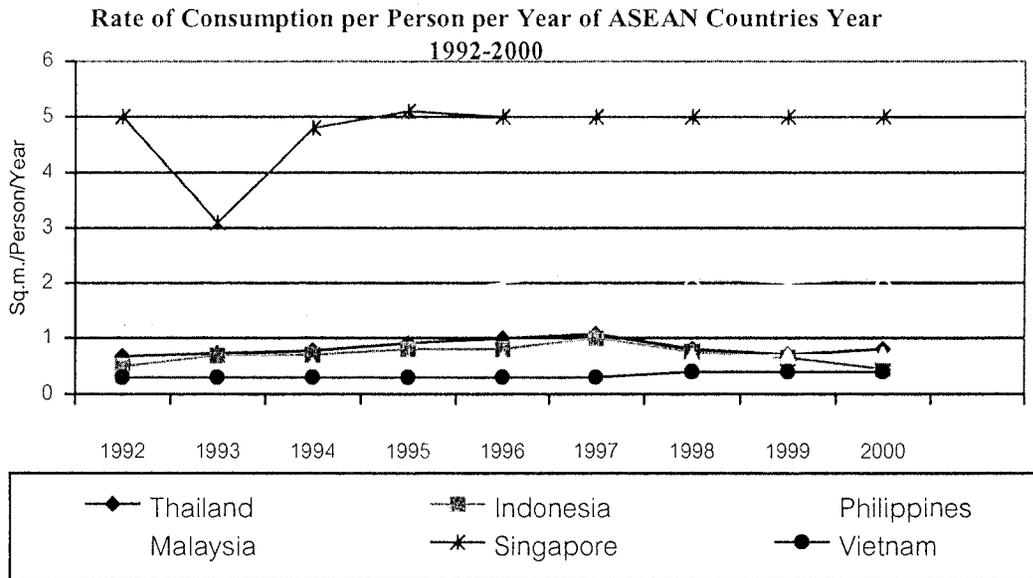


Figure 2.6. The Consumption Rate per Person per Year of NON-ASEAN Countries.

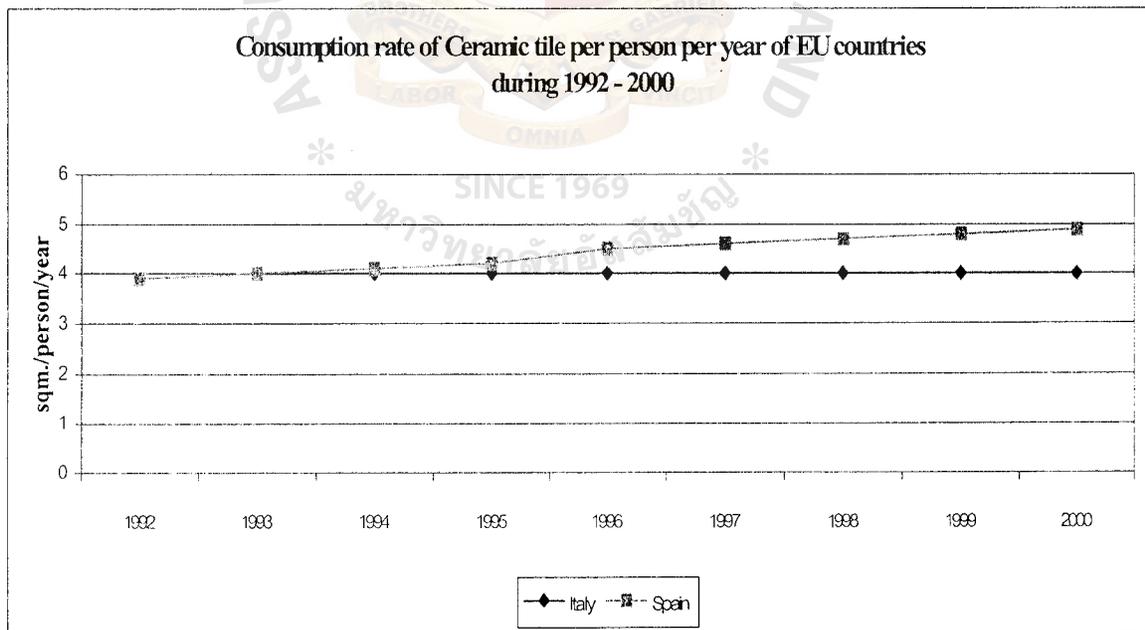
(2) Asean Countries:

We will see from the below graph that the consumption rate per person per year is in the low level about 0.5-2.5 sq.m. per year, except Singapore that about 4.5 sq.m. per year. So the Asean market is the major market that can be expanded in the near future.



Sources: Master Plan: Thai Ceramic Tiles Industry, Industrial Chamber

Figure 2.7. Consumption Rate of Ceramic Tile Per Person Per Year of ASEAN Countries.



Sources: Sosugo Ceramic Co., Ltd.

Figure 2.8. Consumption rate of Ceramic Tile per Person per Year of EU Countries during 1992-2000.

From the Figure 2.5, we can see that the consumption of ceramic tile per person per year of the European countries is much more than in Asian countries. China has the most capacity in the world, but the consumption is very low. In the ASEAN countries except Singapore, most countries have the consumption rate in the low level. This shows that it has much more room to expand the use of ceramic tile in this region and developing countries. In Spain and Italy, the consumption rate is about 4-5 square meter per person per year while the ASEAN countries is only 1 square meter per person per year. If we can persuade the people to use more tile instead of other materials or more places than the toilet and kitchen, the ceramic tile can be expanded much for this region and many countries will come to this market to compete with the domestic manufacturers and the market will very competitive.



2.2.4 Ceramic Tile Industry in Thailand

Manufacturer and Total Capacity

Table 2.3. Capacity in Ceramic Industry: By Manufacturer.

MANUFACTURER	CAPACITY M.SQM.	DISTRIBUTION %	
		DOMESTIC	EXPORT
1. TCC	30	70	30
2. TGCI	24.6	77	23
3. UMI	19.6	77	23
4. DYNASTY	4.3	95	5
5. TILE TOP	5	95	5
6. SOSUCO	17.5	80	20
7. RCI	5.5	62	38
8. CERATECH	4	NA	NA
OTHER	3.7	NA	NA
TOTAL	114		

Source: Marketing Dept., Thai Ceramic Co., Ltd.

Market Value in Thailand

Market size of this industry is about 13,000 million baht / per year that the size nearly equals the production capacity of overall industry in the normal situation. Due to economic slowdown, market size was reduced to 50% of overall production capacity amounting 6,000 – 8,000 million bahts / per year in the past 2-3 years.

Table 2.4. Market Value in Thailand.

Company	Brand	Capacity (m.sqm.)
Thai Ceramic Company Limited	Cotto	30
Thai-German Industry Company Limited	Campana	24.6
Union Mosaic industry Company Limited	UMI	19.6
Tile Top Industry Company Limited	Tile Top	5
Dynasty Company Limited	Dynasty	4.3
Royal Ceramic Industry Company Limited	RCI	5.5
Sosugo Ceramic Company Limited	Sosugo	17.5
Ceratech Company Limited	Karat	4
Others		3.7
Total		114.2

Resource: Thai Ceramic Co., Ltd

Capacity/Year 114 m.sq.m.

13,000

Value (114x114 baht/sq.m) m.baht

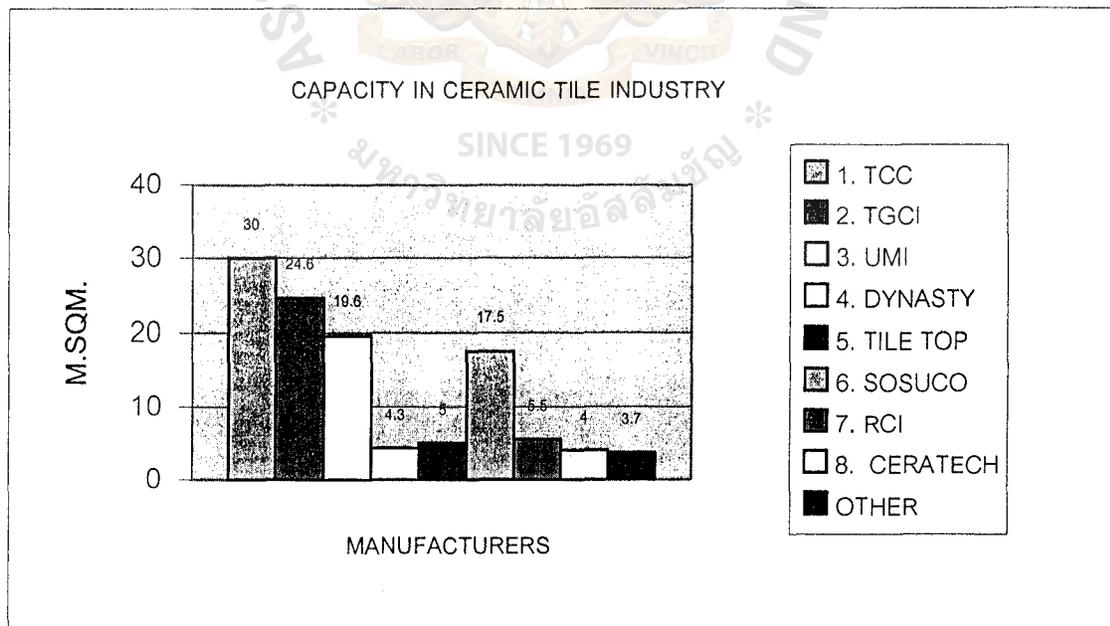


Figure 2.9. Total Capacity in Thailand.

Table 2.5. Domestic Market Value and Growth Rate.

(unit/m.sq.m)

	1996	1997	1998	1999	2000	2001	2002*
Market Demand	59.7	61	43	47	58	66	77
Growth Ratio (%)	12	2	-30	9	24	14	17
Capacity	85	85	85	85	85	90	90
Oversupply/ Undersupply	25.3	24	42	38	27	25	27

Source: Marketing Dept, Thai Ceramic Co., Ltd.

Generally in 2001 the economic condition of Thailand in several industries is still in market saturation. Therefore, the growth of national income (NI) is not more than 2-3% according to the information of Bank of Thailand due to the fact that several industries have exported saturation. However, both floor tiles and wall tiles have grown more than 14% since the year 2000 with market value at 6,000-7,000m baht at the year 2001 and the demand of ceramic tiles for the year 2002 will expand more than this year about 17% because the economic condition has the good trend together with the monetary institutions have the policy in easing the loan. The result is that the projects have been expanded though the demand in country has been increased and also the production capacity exceeded 25m.sq.m. As such the competition is still terrible. A lot of entrepreneurs that in the past had intended to compete in prices have changed the ideas by emphasizing on production quality and differentiated instead of war pricing.

For next year 2002, we analyse that the industry will be expanded otherwise the supply is still over demand. The competition is still intense, but in the quality more than the price. Exporting is another way to increase sales in the condition that supply over demand. More confidence for people to invest in business, that lead to increasing in

property, also ceramic. The demand will be close to 77 million square meter next year and the production is the same.

Market Share

Ceramic tile industry will be segmented by demographic variable such as income, education, occupation, family life cycle and consumer behavior (Multi-attribute demographic segmentation). For market segmentation, they will divide the market into commodity market and High-end market by considering other variables such as psychological, consumer behavior because each target group has its own preferences (Clustered preferences). Thus, company uses the differentiated marketing strategy in order to suit the need of each target group.

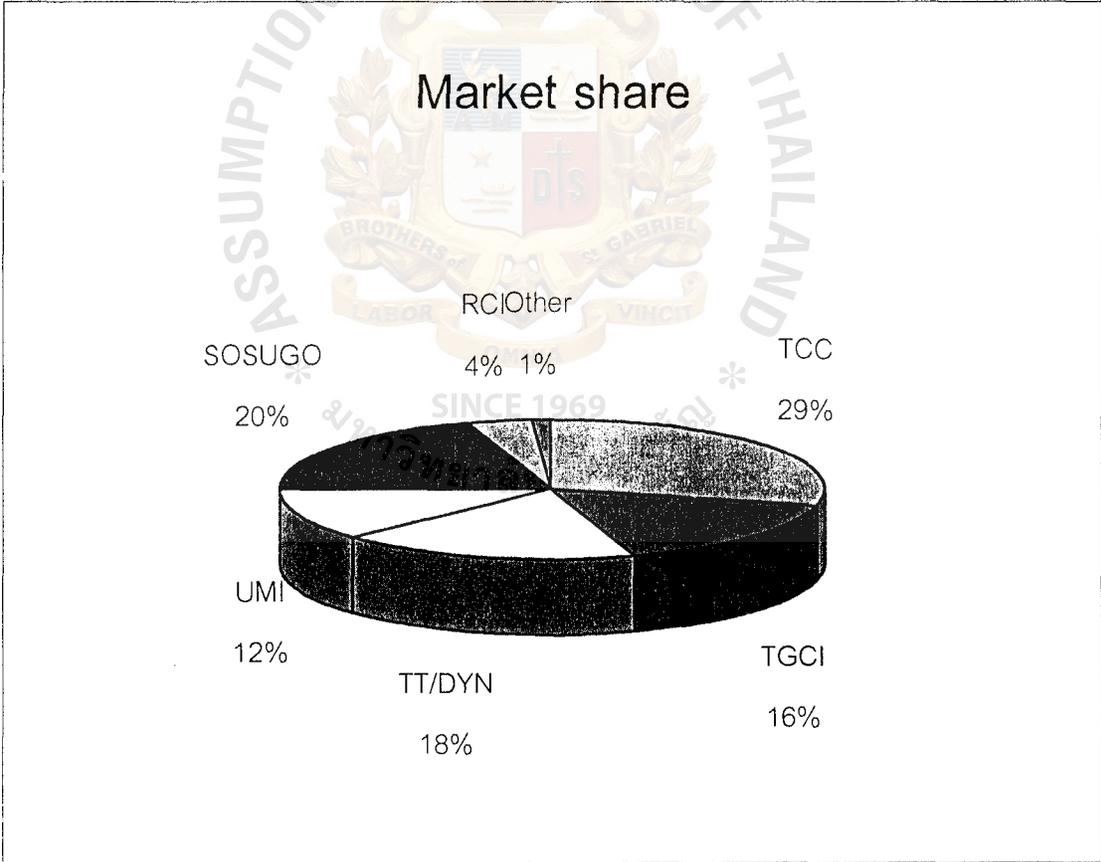


Figure 2.10. Market Share in Thailand.

Market Segmentation

Ceramic Tiles Industry has been divided according to income, education, occupation and family life cycle.

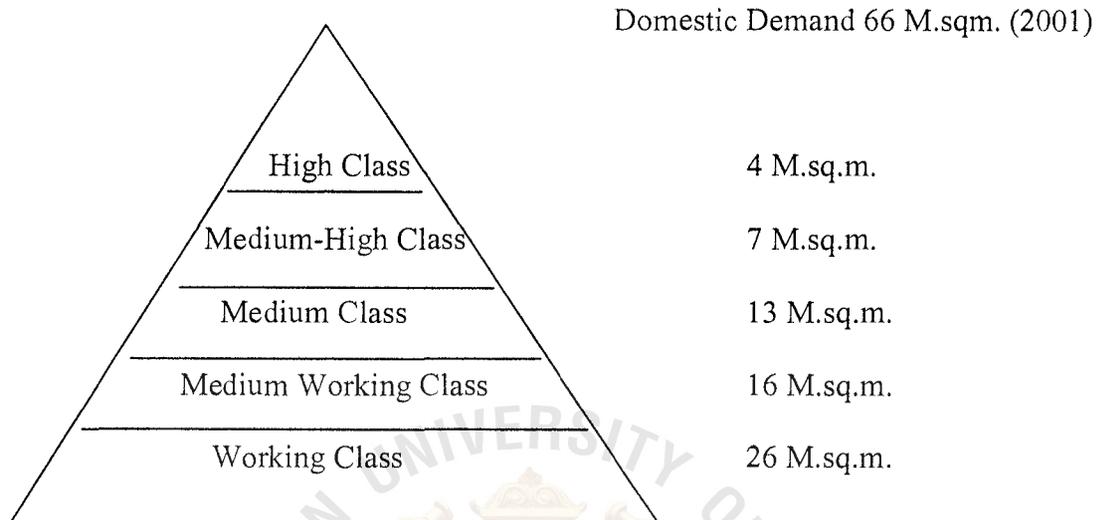


Figure 2.11. Market Segmentation.

Distribution Channel

Domestic Market

The company's products are distributed through the Cement Thai agents, which are about 600 stores nationwide. Moreover, the company also uses the salesperson in order to stimulate the sales volume by dividing the responsible area into 6 parts –Metro, North East, West, East, North and South.

- (1) Direct sales to consumers and retailers by using salesman and assigned the responsibility follow the sales area both in Bangkok and provinces.
- (2) Selling through sales representatives by assigning the representatives from construction suppliers and considering the credit of each sale representative.

These sale representatives need to issue the Book of Guarantee (B/G) to guarantee the risk for sale representatives.

- (3) Selling to customers via architects, which in fact this selling plan does not succeed as the economic condition for investment is not good enough.

International Market

Selling to foreign market in order to increase demand as the domestic demand has been decreased and the result is over capacity, high competition in market. Therefore, each manufacturer has tried to expand the exporting market. And the majority will use the exporting officers in creating the new market. The most important strategy in ceramic tiles industry is lower the prices so normally the major selling point is trying to clear out the stocks and also creating economic of scale from production.

2.3 ASEAN Free Trade Area (AFTA)

2.3.1 AFTA Overview

Background

At the Fourth ASEAN Summit in Singapore in January 1992, the ASEAN heads of government formally agreed to establish an ASEAN Free Trade Area (AFTA) and signed the Singapore Declaration and the Framework Agreement on Enhancing ASEAN Economic Cooperation. The ASEAN Economic Ministers signed the Agreement on the Common Effective Preferential (CEPT) Scheme for AFTA. This scheme is the main mechanism for the realization of AFTA.

Objectives

The ultimate objective of AFTA is to increase ASEAN's competitive edge as a production base geared for world market. Through the elimination of intra-regional tariffs and non-tariff barriers, ASEAN's manufacturing sectors will become more efficient and competitive.

Members of AFTA

There are six original members of AFTA i.e Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand.

Now AFTA has 10 members including 4 new members i.e. Vietnam (joined in 1995) Laos and Myanmar (joined in 1997) and Cambodia (joined in 1999)

Concept

According to the CEPT Agreement, the countries of ASEAN would reduce intra-regional tariffs on all manufactured items including capital goods and processed agricultural products and remove non-tariff barriers over a 15-year period commencing 1 January 1993.

Chorology

1990

Oct. 29-30 22nd ASEAN Economic Ministers Meeting (AEM) in Denpasar, Bali agrees to apply a common effective preferential tariff on selected industrial products which initially include cement fertilizer and pulp.

1991

Oct. 4-6 ASEAN Seniors Economic Official Meeting (SEOM) in Kuala Lumpur agrees on amendments to the Thai proposal to establish AFTA.

Oct. 7-8 23 ARM in Kuala Lumpur agree to form a regional free trade area within 15 years.

1992

Jan. 27-28 At the 4th ASEAN Summit in Singapore, the ASEAN heads of government formally agreed to establish an ASEAN Free Trade Area and sign the Singapore Declaration and the Framework Agreement on Enhancing ASEAN Economic

Cooperation. AEM sign the Agreement on the Common Effective Preferential Scheme for the ASEAN Free Trade Area.

Sept. 11 ASEAN inaugurates the AFTA council to speed up the implementation of AFTA.

Oct. 22-23 24th AEM in Manila reiterated to launch AFTA as scheduled on 1 January 1993.

Dec. 11 AFTA Council meets in Jakarta. Three documents (Operational Procedures for CEPT, Rules of origin for CEPT, and Interpretative Notes to the Agreement on the CEPT Scheme for AFTA) are approved. The ASEAN countries exchange summary of products included and excluded and tentative list of product inclusion or temporary exclusion. AFTA Council approved each country's general formula of tariff reduction schedule.

1993

Jan. 1 The ASEAN Free Trade Area (AFTA) officially starts

April 30 Target date of each ASEAN country to submit final lists exceptions, temporary exclusions, quantitative*restrictions, and barriers as well as the tariff reduction schedules.

July 12-13 Submission off to CEPT inclusion list was completed.

Oct 7-8 AEM in Singapore finalized CEPT offers of Member Countries CEPT implementation for January 1, 1994.

2.3.2 Mechanism of AFTA

The common Effective Preferential Tariff (CEPT) scheme is the main implementing mechanism of AFTA. Under the CEPT member countries gradually lower tariffs on each other's imports

ASEAN will truly be a free trade area once obstacles to trade are removed and taxes or tariffs on goods traded among member countries are reduced to zero to five percent.

This will be achieved gradually over a 15-year period or by the year 2008 through a schedule of tariff reductions under the **Common Effective Preferential Tariff (CEPT)** scheme.

At the same time, CEPT allows each country to exclude certain products under the following categories:

- (1) Unprocessed agricultural products;
- (2) General exceptions, particularly those with health and security reasons; and
- (3) Temporary exclusion for “sensitive products” that would be subject to review by the eight year or year 2001.

AFTA involved other areas of cooperation, including the harmonization of standards, the reciprocal recognition of tests and certification, the removal of barriers to foreign investments, macroeconomic consultations, rules for fair competition, and the promotion of venture capital.

There are two forms of tariff reductions under CEPT:

- (1) **Fast Track.** Fifteen (15) products identified at the Forth ASEAN Summit shall be covered by a fast track scheme, which sees a lowering of tariffs to 0-5 percent within 7-10 years.

Tariffs above 20 percent will be reduced to 0-5 percent within ten years.

Tariffs 20 percent and below will be reduced to 0-5 percent within seven years.

Product group under the fast-track program are the follows:

- (a) Vegetable Oil

- (b) Chemical
- (c) Fertilizers
- (d) Rubber Products
- (e) Textiles
- (f) Gems and Jewelry
- (g) Electronics
- (h) Cement
- (i) Pharmaceutical
- (j) Plastics
- (k) Leather Products
- (l) **Ceramic** and Glass Products
- (m) Copper Cathodes
- (n) Wooden and Rattan Furniture

(2) Normal Track. Products under the normal track will see their tariffs reduced over a period between 10-15 years.

Tariffs above 20 percent will be reduced in two stages: a) a cut within 5-8 years; b) a final reduction to 0-5 percent after another seven years, or a total of 15 years.

Tariffs of 20 percent and below will be reduced to 0-5 percent in ten years.

Each ASEAN member may exclude certain products from CEPT coverage under the various exclusion lists

Unlike other ASEAN members, the Philippines did not have to start implementing CEPT as scheduled last January 1, 1993. CEPT for the Philippines takes effect only after tariff reforms under Executive Order 470 are completed.

A member country enjoys the rates under CEPT if at least 40 percent of the value of its products originates from any one or more member states.

Once a product is included in the CEPT, quantitative restrictions should be eliminated immediately upon the enjoyment of concessions while other non-tariff barriers should be removed within 5 years from the enjoyment of concessions.

Once a product is included in CEPT, other forms of trade restrictions (i.e. quantitative restrictions and foreign exchange restrictions and other nontariff barriers) are removed within five years.

For the Philippines, the good news is that most of its top exports are included in the CEPT. And even if a top exporter like automobile parts is temporarily excluded, it is not a clear loser because other ASEAN countries have likewise excluded this same product group.

Potential exports, however, such as cocoa products and fruit juices, which have potential competitive advantages, are excluded. Garment manufacturers, on the other hand, are potential winners, but could not develop the export market as only textile inputs like raw hides, were included but shoes were excluded, this preventing shoe manufacturer from exporting freely to ASEAN.

2.3.3 Acceleration of AFTA

Because of financial and economic crisis since July 1997 and in order to regain business confidence, enhance economic recovery and promote growth, the ASEA Leaders are committed to realisation of the ASEAN Free Trade Area (AFTA). In addition, the Leaders agreed on special incentives and privileges to attract foreign direct investment into region. To enhance further economic integration of the region, the Leaders also agreed to further liberalise trade in services.

To accelerate the ASEAN Free Trade Area (AFTA), the Leaders agreed that the six original signatories to the Agreement on the Common Effective Proferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area (AFTA) – Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore and Thailand would advance the implementation of AFTA by one year from 2003 to 2002. They also agreed to achieve a minimum of 90% of their total tariff lines with tariffs of 0-5% by the year 2000, which would account for 90% of intra-ASEAN trade.

Individually, each country would commit to achieve a minimum of 85% of the Inclusion List with tariffs of 0-5% by the year 2000. Thereafter, this would be increased to a minimum of 90% of the Inclusion list in the 0-5% tariff range by year 2001. By 2002, 100% of items in the Inclusion List would have tariff of 0-5% with some flexibility.

Member Countries also agreed to deepen, as soon as possible, tariff reduction to 0% and accelerate the transfer of the products, which are currently not included in the tariff reduction scheme, into the Inclusion List.

The new members of ASEAN shall maximise their tariff lines between 0-5% by 2003 for Vietnam and 2005 for Laos and Myanmar; and expand the number of tariff lines in the 0% category by 2006 for Vietnam and by 2008 for Laos and Myanmar.

2.3.4 The ASEAN Free Trade Area: REACHING ITS TARGET

THE ASEAN FREE TRADE AREA: REACHING ITS TARGET

Opening remarks of Rodolfo C. Severino, Secretary-General

of the Association of Southeast Asian Nations,

at the AFTA 2002 Symposium

Jakarta, 31 January 2002

I have the great honor of welcoming all of you to this conference on the ASEAN Free Trade Area.

We are gathered here today to take a look at AFTA – its significance, where it is today, where it is headed, and what more it should do.

I am sure that I speak for all of us, particularly for the ASEAN Secretariat and the other sponsors of our conference, when I express my deepest gratitude to Her Excellency

President Megawati Soekarnoputri for the great honor of her presence, for giving us her time, and for graciously consenting to share with us her thoughts on AFTA and Indonesia's perspective on it. I thank His Excellency Minister George Yeo for coming all the way from Singapore to give us his usual sharp insights into AFTA and the state -- and the imperatives -- of regional economic integration.

Ten years ago, on the occasion of the fourth ASEAN summit meeting in Singapore, ASEAN's economic ministers signed the agreement on the Common Effective Preferential Tariffs for the ASEAN Free Trade Area. The agreement embodied the commitment of the then six ASEAN member-states to set up a free trade area in the region within fifteen years. This meant reducing most tariffs on trade within the region to 0-5 percent, in accordance with an agreed schedule. This act signified a remarkable prescience on the part of ASEAN's member-states. They knew even then that they must integrate their economies if they were to be competitive, if they were to stand a chance of flourishing, of withstanding competition, in an increasingly competitive world. And this was at the height of the Southeast Asian countries' economic surge, before globalization became the buzzword that it is today.

Before long, ASEAN found fifteen years to be too conservative. The world was not going to stand still for AFTA. So, in 1995 ASEAN moved the target year forward

by five years, to 2003. Faced with the challenge of the financial crisis of 1997-1998, the ASEAN leaders decided to advance the target further, to the beginning of 2002.

The first of January this year, therefore, marked a big milestone for AFTA and in ASEAN's history. The first six signatories to the AFTA agreement – Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand – which are Southeast Asia's leading trading nations, have dropped tariffs to 0-5 percent on most of the products traded among them, in accordance with the tariff-cutting schedules to which they had previously committed themselves. The lowering of tariffs to minimal levels was accompanied by a massive expansion of intra-regional trade – from US\$44.2 billion in 1993 to US\$97.8 billion in 2000. The average tariff on intra-ASEAN trade is now down to 3.2 percent. In 1999, ASEAN's leaders agreed to eliminate all import duties among the first six members by 2010 and by 2015 for the newer members.

ASEAN's newer members – Cambodia, Laos, Myanmar and Viet Nam – acceded to the CEPT/AFTA agreement upon their membership in ASEAN. They are at various stages in their respective tariff-reduction schedules.

ASEAN responded to the 1997-1998 financial crisis not by backtracking on AFTA, as some commentators hastily predicted, but by accelerating it. And ASEAN is dealing with the current global economic downturn by staying the course. It is meeting the competitive challenge from China, India and others by more deeply integrating the regional economy through AFTA and other schemes and by more closely engaging those surging economies and, in general, remaining open to the global economy.

To be sure, AFTA could do more – and should do more – to free up trade in agricultural products. It should have stuck to the timetable for liberalizing trade in automobiles in the region. But these shortcomings have to do with small parts of the total trade in ASEAN, and they are temporary. Tariffs on sensitive agricultural products

will still fall to 0-5 percent. Tariffs on automobiles will drop to 0-5 percent for all ASEAN members, although a little later than originally scheduled. It is important to stress that these adjustments were made according to established ASEAN rules and international norms. In any case, no free trade area can be free of the need for flexibility in dealing with difficult and sensitive sectors.

AFTA is the centerpiece of ASEAN's work toward regional economic integration, and integration gives Southeast Asia the strength more deeply to engage its neighbors—China, Japan, Korea, and Australia and New Zealand – as it is doing now, for the benefit of all.

The participation in this conference of Her Excellency President Megawati and His Excellency Minister Yeo and, I am sure, what they have to say demonstrate the central importance that the leaders of ASEAN give to AFTA. ASEAN's leaders clearly recognize the fact that the impact of regional economic integration goes beyond economics; it has everything to do with peace and stability in Southeast Asia. The ASEAN Secretariat and I are deeply grateful to you, Madame President, and to you, Minister Yeo.

The representatives of the international business community who form our discussion panel this morning will shed light on how AFTA benefits business and the enormous work that remains to be done. I thank them, as I thank our sponsors, the Jakarta Post, the US-ASEAN Business Council, Ford Motor Company, PT Fluor Daniel, PT Freeport Indonesia, Daimler-Chrysler, and Goodyear Indonesia. Their support is much appreciated.

2.3.5 Import Duty of Ceramic Tile of ASEAN Countries
(Collected at September' 2001)

Vietnam

Import Duty 50.0% on minimum value

VAT 10.0% on real value, ID

Note: Minimum Value

Minimum value of normal tiles 6.00 USD/Sq.m.

Minimum value of anti-slip tiles 7.00 USD/Sq.m.

Allow only tiles bigger than 16”X16” to be imported

Thailand

Import Duty 30% on CIF

Cambodia

Ex-Fac 100.0 Baht/Sq.m.

Inland Transp; Fac-Border

(10% ON Ex-Fac) 10.0 Baht/Sq.m.

Cost 110.0 Baht/Sq.m.

(1) Import Duty (7% On Cost) 7.7 Baht/Sq.m.

Cost and Import Duty 117.7 Baht/Sq.m.

(2) VAT

(10% On cost and import duty) 11.8 Baht/Sq.m.

Ex-Fac and inland trans; Fac-Border 110.0 Baht/Sq.m.

Inland Transp Border-Customer 30.0 Baht/ Sq.m.

Cost 140.0 Baht/Sq.m.

(3) VAT (10% on Cost) 14.0 Baht/Sq.m.

(4) =(3)-(2) 2.2 Baht/Sq.m.

Total Import Expense =(1)+(2)+(4) 21.7 Baht/Sq.m.

Note: No.2) is the VAT that have to pay first when importing and after that government will re-calculate VAT at no.3) by calculate at ex-fac price plus transportation cost from factory to customer. The difference between no.2 and no.3 is the VAT that customer have to pay more.

Myanmar

Export Earning	15.0% ON FOB
Import Duty	1.5% ON FOB
Commercial Tax	<u>2.0%</u> ON FOB
Total Duty	<u>38.5%</u> ON FOB

Malaysia

Import Duty	20.0% ON CIF
Sales Tax	<u>10.0%</u> ON CIF, ID
Total Duty	<u>32.0%</u> ON CIF

Brunei

Import Duty	0.0%
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Philippines

Import Duty	15.0% ON FOB
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Indonesia

Import Duty	5.0% ON CIF
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Singapore

Import Duty	0.0%
GST	3.0% ON CNF

2.3.6 Ceramic Tile under AFTA Agreement

ASEAN FREE TRADE AREA – the free trade area that has 10 members who are Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos,

Myanmar, and Cambodia. These members agreed to reduce the import tax to 0-5% within 10 years which start from January 1, 1993 and complete in year 2003, except the new members of Vietnam that will reduce the tariff to 0-5% within January 1, 2006. For the Laos, Myanmar, and Cambodia have to reduce tariff to 0-5% within January 1, 2008 including terminate other barriers with is not tariff also.

For the ceramic tile, each country in AFTA has set the path of reducing the tariff in the Table 2.6.



Table 2.6. AFTA's Path of Reducing the Tariff.

C C	HS COD E	DESCRIP	IN D	MFN	19 96	19 97	19 98	19 99	20 00	20 01	20 02	20 03
	6907	Unglazed ceramic flags and paving, hearth or wall tile;										
V N *	6907. 00.00 0	Unglazed ceramic flags and paving, hearth or wall tile;	E									
	6907. 10	- tiles, cubes and similar articles, whether or not										
B N	6907. 10.00 0	Tiles, cubes and similar articles, whether or not	F	0	0	0	0	0	0	0	0	0
I D	6907. 10.00 0	- tiles, cubes and similar articles, whether or not	N	10	10	10	5	5	5	5	5	5
P H	6907. 10.00 0	- tile cubes and similar articles, whether or not recta	E	25								
S G	6907. 10.00 0	Unglazed ceramic tiles cubes & the like of a side less	N	0	0	0	0	0	0	0	0	0
T H *	6907. 10.00 0	- tiles, cubes and similar articles, whether or not	F	80	25	20	15	10	5	5	5	5
M Y	6907. 10.10 0	Floor, hearth and wall tile	F	0	0	0	0	0	*	*	*	*
M M	6907. 10.90 0	Other	F	5	5	5	5	5	5	5	5	5
	6907. 90	- other										
B N	6907. 90.0 00	Other	F	0	0	0	0	0	0	0	0	0
C C E	HS COD E	DESCRIP	IN D	MFN	19 96	19 97	19 98	19 99	20 00	20 01	20 02	20 03
I D	6907. 90.00 0	- other	N	10	10	10	5	5	5	5	5	5

Table 2.6. AFTA's Path of Reducing the Tariff. (Continued)

C C	HS COD E	DESCRIP	IN D	MFN	19 96	19 97	19 98	19 99	20 00	20 01	20 02	20 03
S G	6907. 90.00 0	Other unglazed ceramic tiles flags & the like	N	0	0	0	0	0	0	0	0	0
T H *	6907. 90.00 0	- other	F	80	25	20	15	10	5	5	5	5
M Y	6907. 90.10 0	Floor, hearth and wall tile	F	0	0	0	0	0	*	*	*	*
M Y	6907. 90.90 0	Other	F	5	5	5	5	5	5	5	5	5
	6908	Glazed ceramic flags and paving, hearth or wall tiles										
V N *	6908. 00.00 0	Glazed ceramic flags and paving, hearth or wall tiles	E	35								
	6908. 10	- tiles, cubes and similar articles, whether or not										
B N	6908. 10.00 0	Tiles, cubes and similar articles, whether or not	F	0	0	0	0	0	0	0	0	0
I D	6908. 10.00 0	Tiles, cubes and similar articles, whether or not	N	10	10	10	5	5	5	5	5	5
P H	6908. 10.00 0	Tiles, cubes and similar articles, whether or not	E	35								
C C	HS COD E	DESCRIP	IN D	MFN	19 96	19 97	19 98	19 99	20 00	20 01	20 02	20 03
T H *	6908. 10.00 0	Tiles, cubes and similar articles, whether or not	F	80	25	20	15	10	5	5	5	5
M Y	6908. 10.10 0	Floor, hearth and wall tile	F	0	0	0	0	0	*	*	*	*
S G	6908. 10.10 0	Plain glazed ceramic tiles cubes & the like of a side	N	0	0	0	0	0	0	0	0	0
M Y	6908. 10.90 0	Other	F	2	2	2	2	2	2	2	2	2

Table 2.6. AFTA's Path of Reducing the Tariff. (Continued)

C C	HS COD E	DESCRIP	IN D	MFN	19 96	19 97	19 98	19 99	20 00	20 01	20 02	20 03
S G	6908. 10.90 0	Other glazed ceramic tiles flags & the like	N	0	0	0	0	0	0	0	0	0
	6908. 90	- other:										
B N	6908. 90.00 0	Other	F	0	0	0	0	0	0	0	0	0
I D	6908. 90.00 0	Other	N	10	10	10	5	5	5	5	5	5
P H	6908. 90.00 0	Other	E	35								
T H *	6908. 90.00 0	Other	F	80	25	20	15	10	5	5	5	5
M Y	6908. 90.10 0	Floor, hearth and wall tile	F	0	0	0	0	0	*	*	*	*
S G	6908. 90.11 0	Plain glazed ceramic tiles exclude tiles of side less than 7 cm.	N	0	0	0	0	0	0	0	0	0
S G	6908. 90.19 0	Other glazed ceramic tiles exclude tiles of side less than 7 cm.	N	0	0	0	0	0	0	0	0	0
C C	HS COD E	DESCRIP	IN D	MFN	19 96	19 97	19 98	19 99	20 00	20 01	20 02	20 03
M Y	6908. 90.90 0	Other	F	2	2	2	2	2	2	2	2	2
S G	6908. 90.90 0	Glazed ceramic cubes and the like of side less than 7 cm.	N	0	0	0	0	0	0	0	0	0

Remark:

SG : SINGAPORE

TH : THAILAND

VN : VIETNAM

BN : BRUNEI

ID : INDONESIA

LA : LAOS

MY : MALAYSIA

MN : MYANMAR

PH : PHILIPPINES

F : FAST TRACK product in the fast track category and reduce the tariff to 0-5% within 1 January 2000

N : NORMAL TRACK product in the normal track category and reduce the tariff to 0-5% within 1 January 2003

E : TEMPORARY EXCLUSION LIST product in the exemption list for temporary and this products will be reduce the tariff according to the CEPT according to the agreement.

In the table shows that the MFN rate for Thailand is 80% for both glazed and unglazed ceramic tile and will reduced very fast in 1996 to 25% and continue reducing to only 5% now. This will stimulate the importing of tiles from the ASEAN countries such as Indonesia, which has the greatest capacity in the region or the Malaysian producers, which can import with the lower cost than before. This will make the domestic producers aware of the situation and prepare them to cope with the changed situation.

Not only the domestic customers that we have to fight, but also the imported tile will come to share the market in Thailand. You can see the table below that only the domestic manufacturers, the total capacity is higher than domestic demand, the competition is very tight for this industry to survive in the market.

In another viewpoint, we can export ceramic tile to AFTA members with the lower cost. Such as Indonesia, the tariffs reduce from 10% to 5% for the AFTA members. The lower cost of product from the AFTA effect makes Thai ceramic tile be able to expand the market with the lower price and can fight with other countries or even domestic manufacturers in other countries. Other barriers also be can removed and can stimulate the economic of the region and the trading between each other is growing.



III. RESEARCH METHODOLOGY

The purpose of this research is to study the customers' behaviors, attitudes, and marketing mix toward ceramic tile market in Thailand. It is focused on the prospect customers in Bangkok areas. The critical and basic concept developed is based on market research in ceramic tile business.

The scope of this research includes:

- (1) Research Design
- (2) Questionnaire Design
- (3) Data Collection
- (4) Sample Size
- (5) Data Analysis

3.1 Research Design

The definition of the research design is the plan to be followed to answer the research objectives or hypotheses. In essence, the researcher develops a structure to solve a specific problem.

For this study, the researcher selected the survey method for collecting the data because it allowed the researcher to collect original data for describing a population too large to observe directly. The 400 sets of questionnaires were distributed to respondents in Bangkok areas during August 7 to August 31, 2002. The questionnaire was divided into 2 main sections. The first section contains 15 close-ended questions to survey on the customers' behavior toward ceramic tile market. The second section collects the respondent's personal information using 5 close-ended questions.

3.2 Questionnaire Design

Every form of survey research relies on the use of a questionnaire. The questionnaire is the common thread for almost all data collection methods. The

questionnaire (sometimes referred to as an *interview schedule* or *survey instrument*) plays a critical role in the data collection process. An elaborate sampling plan, well-trained interviewers, proper statistical analysis techniques, and good editing and coding are all for naught if the questionnaire is poorly designed. Improper design can lead to incomplete information, inaccurate data, and of course higher costs. The questionnaire and the interviewer are the production line of marketing research. It is here that the product, be it good or bad, is created. To design a good questionnaire, a number of considerations must be kept in mind: Does it provide the necessary decision-making information for management and does it consider the respondent.

3.2.1 The Questionnaire Development Process

Designing a questionnaire involves a logical series of steps, as shown below:

- Step 1: Determine Survey Objectives, Resources, and Constraints
- Step 2: Determine the Data Collection Method
- Step 3: Determine the Question Response Format
- Step 4: Decide the Question Wording
- Step 5: Establish Questionnaire Flow and Layout
- Step 6: Evaluate the Questionnaire
- Step 7: Obtain Approval of All Relevant Parties
- Step 8: Pretest and Revise
- Step 9: Prepare Final Questionnaire Copy
- Step 10: Implementing the Survey

3.2.2 Questionnaire Construction

To achieve the objectives of the study, the questionnaire was designed to be easy to understand, short and convenient for answering. The Questionnaire is divided into 2 main sections. The first section is surveying about the respondent's personal

information. The second section is surveying about the customers' behaviors, attitudes, and brand awareness in the market. The question in each part survey customers' behaviors regarding the following:

- Part 1: Perception of people toward ceramic tile product
- Part 2: Factors or influence that effect people in decision processes
- Part 3: The brand awareness in the market
- Part 4: The image of Cotto tile and the marketing media

All of the Close-ended Questions can be easily answered by simply checking or marking for the right answer that direct to your mind or behaviors, attitudes that people will behave.

3.3 Data Collection

The survey method is used in this research. The 400 sets of questionnaires were distributed to the respondents, who are working people in Bangkok area, to collect the data. When the respondents returned the questionnaires, the researcher checked it for any error or incomplete data. So, the researcher asked the respondents to fill or correct it again, if any.

3.4 Sample Size

According to the infinite population, the techniques for determining sample size of statistical inference are based on the relationship among the estimated proportion of customer, the maximum allowance for error between the true proportion and sample proportion, and confidence level which indicates the long-run probability that the confidence interval estimate will be correct.

So, the samples of this survey are randomly selected from the working people in Bangkok area.

Thus, the formula is:

$$n = \frac{Z^2 [P (1-P)]}{E^2}$$

where,

- n = Sample size
- P = Population proportion that has required characteristics
- Z = Acceptable level of confidence in standard error
- E = Allowed level of sampling error

The population proportion is unknown; a common procedure is to assume the worst case or pessimistic assumption (where the population variance is at its maximum) regarding the value of P. The value of 0.5 will make the value of the expression P (1-P) larger than any other possible value of P. So, Population proportion (P) is equal to 0.5.

Since the confidence level is 95 percent, Z score equals 1.96 and the allowed sampling error (E) equals 0.05 or 5 percent.

Substituting in Formula,

$$\begin{aligned} n &= \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} \\ &= 384 \text{ or } \sim 400 \text{ respondents} \end{aligned}$$

Therefore, the sample size for this research is 400 units

3.5 Data Analysis

In this research, the data from all questionnaires have been analyzed by the frequency distribution and descriptive statistics, particularly percentage. The researcher uses the SPSS (the Statistical Package for Social Sciences) version 11.0 for Windows, to analyze and deliver the survey result. The survey results were presented in form of tables, pie charts and bar charts.



IV. RESULTS AND ANALYSIS

4.1 Questionnaire Analysis

Table 4.1. Correlation of Factors in Using Ceramic Tile.

Correlations

		no2	price	pattern	suitable	install	nice	maintain
no2	Pearson Correlation	1	-.275**	.071	-.065	.013	-.080	-.013
	Sig. (1-tailed)	.	.000	.176	.196	.434	.151	.433
	N	400	181	173	173	171	169	173
no4	Pearson Correlation	-.275**	1	.019	-.440**	.076	-.126	.182**
	Sig. (1-tailed)	.000	.	.400	.000	.161	.051	.009
	N	181	181	173	173	171	169	167
no4	Pearson Correlation	.071	.019	1	-.064	.144*	-.057	-.160*
	Sig. (1-tailed)	.176	.400	.	.202	.030	.232	.020
	N	173	173	173	173	171	169	167
no4	Pearson Correlation	-.065	-.440**	-.064	1	-.146*	-.031	-.232**
	Sig. (1-tailed)	.196	.000	.202	.	.028	.343	.001
	N	173	173	173	173	171	169	167
no4	Pearson Correlation	.013	.076	.144*	-.146*	1	-.085	-.086
	Sig. (1-tailed)	.434	.161	.030	.028	.	.137	.135
	N	171	171	171	171	171	169	167
no4	Pearson Correlation	-.080	-.126	-.057	-.031	-.085	1	.042
	Sig. (1-tailed)	.151	.051	.232	.343	.137	.	.294
	N	169	169	169	169	169	169	167
no4	Pearson Correlation	-.013	.182**	-.160*	-.232**	-.086	.042	1
	Sig. (1-tailed)	.433	.009	.020	.001	.135	.294	.
	N	173	167	167	167	167	167	173

**Correlation is significant at the 0.01 level (1-tailed).

*Correlation is significant at the 0.05 level (1-tailed).

.Ho: The use of ceramic tile does not depend on the price

Ha: The use of ceramic tile depends on the price

The factor that defines the behavior of the consumer to not use the ceramic tile for decorating is the price, the suitable use of ceramic tile, the beauty, and the maintenance, which has the confidence interval 0.99, 0.80, 0.85, and 0.66 respectively.

This information show that the price is the major factor that people will consider when buying the ceramic tile or other construction material. Also, this shows that people think that the ceramic tile is high price product compared to other materials. Actually the higher price is from the better qualification of the material, and suitable to use according to the objective. Preparing the marble design with the real marble, the price of ceramic tile is a little bit higher but the ceramic tile is stronger because it is fired in the high temperature, so the water absorption is lower than the real marble. The controlled design makes ceramic tile more beautiful and has variety than the real one.

The second highest percentage of reason that people do not use the ceramic tile is the suitability of usage. Now the ceramic tile has many types such as floor tile, wall tile, granito tile, mosaic tile, etc. each of which has the different objectives that is cover to all usage. For the floor tile in the house, you can use normal floor tile, or for the outdoor place, you can use the granito tile in the high traffic area. The mosaic tiles for the outdoor wall of the building, or decorate in the kitchen and bathroom. Now the people just do not realize that the ceramic tile is expanded to cover all usage of consumers and some provided with the better qualification than the other materials or the natural one.

For the beauty and maintenance factors that people specify that they are the reason that they do not use the ceramic tile, actually ceramic tile has a variety in sizes, colours, and design, it should be no problem about the beauty. The new technologies and new techniques create the ceramic tile in the advance and beautiful way. Ceramic tile is very to clean and maintain if you use it according to the objective. Just the plain water can clean the tile and make it nice and beautiful as the new one.

The strategy is to educate the people about the product specification and the better quality compared to the other material. The higher price for the higher qualification and higher quality. The range of products that can satisfy consumers in all need, it has many

types suitable for many uses. Now we have ceramic tile that fit in all rooms in the house, for the public use, for the outdoor building, etc. For the beauty factor, we have to do more on display to show the consumers about the way that we lay the tile. The same design, we can arrange it to many designs. This will help consumers know the idea of using it. The display and mock up room can create image and the beauty of using the ceramic tiles. The consumers can see the big or the real picture as to what it look like if you use the ceramic tile.

Table 4.2. Result of Areas Uses of Ceramic Tile.

no3 * no2 Crosstabulation				no3 * no2 Crosstabulation			
Count		no2	Total	Count		no2	Total
		use				use	
bathroom	no	23	23	kitchen	no	78	78
	yes	316	316		yes	260	260
Total		339	339	Total		338	338

no3 * no2 Crosstabulation				no3 * no2 Crosstabulation			
Count		no2	Total	Count		no2	Total
		use				use	
living	no	224	224	bedroom	no	300	300
	yes	114	114		yes	38	38
Total		338	338	Total		338	338

no3 * no2 Crosstabulation				no3 * no2 Crosstabulation			
Count		no2	Total	Count		no2	Total
		use				use	
family	no	258	258	garage	no	267	267
	yes	80	80		yes	71	71
Total		338	338	Total		338	338

Table 4.2. Result of Areas Uses of Ceramic Tile. (Continued)

no3 * no2 Crosstabulation

Count		no2	
		use	Total
balcony	no	186	186
	yes	148	148
Total		334	334

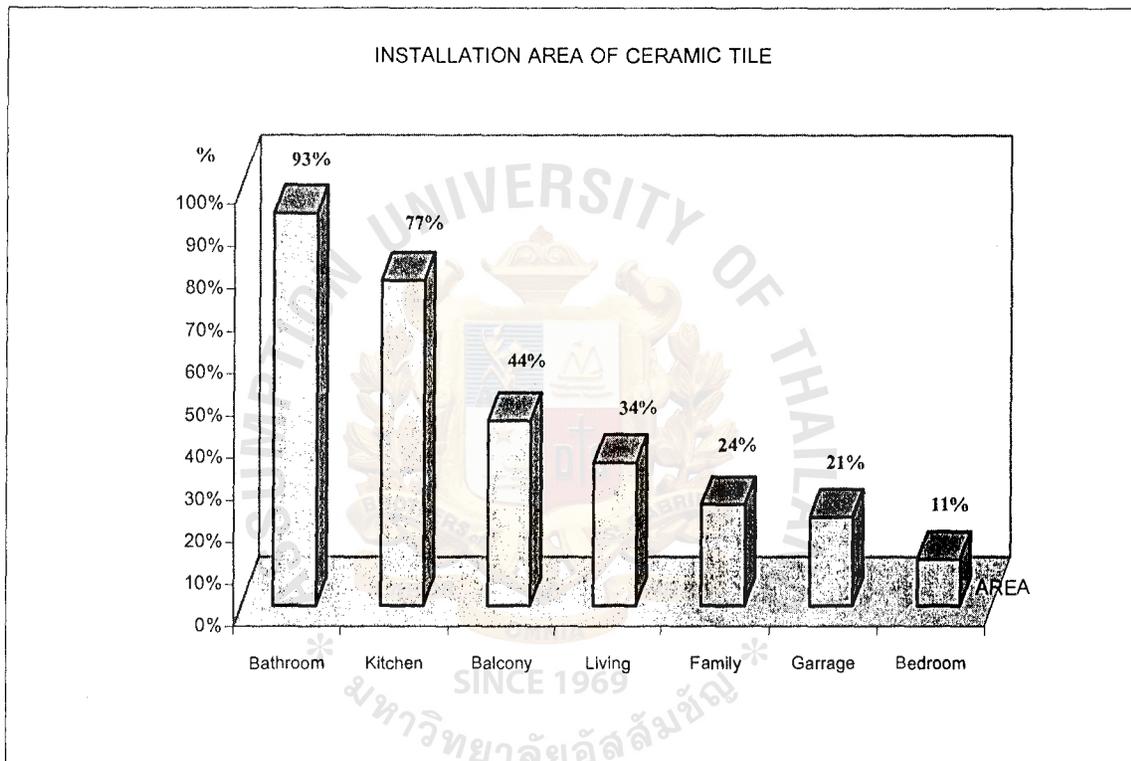


Figure 4.1. Installation Area of Ceramic Tile.

From these questionnaires, people mostly use ceramic tile in the bathroom 93%, kitchen room 77%, balcony 44%, living room 34%, family room 24%, garage 21%, and bedroom about 11%.

From this data, we can ensure that the area that people use the ceramic tile more than 50% is in the bathroom and kitchen room. People still are not aware of using the

ceramic tile in other area in the house, although there are many areas that can use ceramic tile to decorate the house instead of other materials.

This shows that if we can persuade people to use ceramic tile in other areas, it will raise the sales of ceramic tile so much. Now we have the tile that is suitable for balcony as the rustic tile or natural like the stone, we have the granito tile that can use in the garage, or even the marble tile that can decorate in the living room. People are still stuck in the old picture that ceramic tile can be used only in the bathroom or kitchen, but the truth is that we have many types of tile that can be used for all purposes.

We have to display and advertise the Cotto tile in many uses in order to let the consumers consider the ceramic tile in other area other than bathroom or kitchen room. Anyway, we can persuade the wall tile big size as 10"x16" for the new design in the bathroom or mosaic tile 4"x4" in the kitchen room. These new trends of design create more beauty to the consumers and also we can sell in the higher price than the normal one.

Table 4.3. Frequency of Influenced Factor of Buying Ceramic Tile.

Statistics

	first/5	second/5	thrid/5	forth/5	fifth/5
N Valid	390	348	321	302	274
Missing	10	52	79	98	126

first/5

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid price	65	16.3	16.7	16.7
quality	117	29.3	30.0	46.7
brand	6	1.5	1.5	48.2
clean	48	12.0	12.3	60.5
design	63	15.8	16.2	76.7
suitable	91	22.8	23.3	100.0
Total	390	97.5	100.0	
Missing System	10	2.5		
Total	400	100.0		

Table 4.3. Frequency of Influenced Factor of Buying Ceramic Tile. (Continued)

second/5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	price	76	19.0	21.8	21.8
	quality	87	21.8	25.0	46.8
	brand	7	1.8	2.0	48.9
	clean	55	13.8	15.8	64.7
	design	63	15.8	18.1	82.8
	suitable	52	13.0	14.9	97.7
	modern	8	2.0	2.3	100.0
	Total	348	87.0	100.0	
Missing	System	52	13.0		
Total		400	100.0		

third/5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	price	57	14.3	17.8	17.8
	quality	69	17.3	21.5	39.3
	brand	36	9.0	11.2	50.5
	clean	49	12.3	15.3	65.7
	design	54	13.5	16.8	82.6
	suitable	44	11.0	13.7	96.3
	modern	12	3.0	3.7	100.0
	Total	321	80.3	100.0	
Missing	System	79	19.8		
Total		400	100.0		

forth/5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	price	32	8.0	10.6	10.6
	quality	45	11.3	14.9	25.5
	brand	51	12.8	16.9	42.4
	clean	53	13.3	17.5	59.9
	design	54	13.5	17.9	77.8
	suitable	53	13.3	17.5	95.4
	modern	14	3.5	4.6	100.0
	Total	302	75.5	100.0	
Missing	System	98	24.5		
Total		400	100.0		

Table 4.3. Frequency of Influenced Factor of Buying Ceramic Tile. (Continued)

fifth/5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	price	53	13.3	19.3	19.3
	quality	16	4.0	5.8	25.2
	brand	41	10.3	15.0	40.1
	clean	56	14.0	20.4	60.6
	design	45	11.3	16.4	77.0
	suitable	38	9.5	13.9	90.9
	modern	25	6.3	9.1	100.0
	Total	274	68.5	100.0	
Missing	System	126	31.5		
Total		400	100.0		

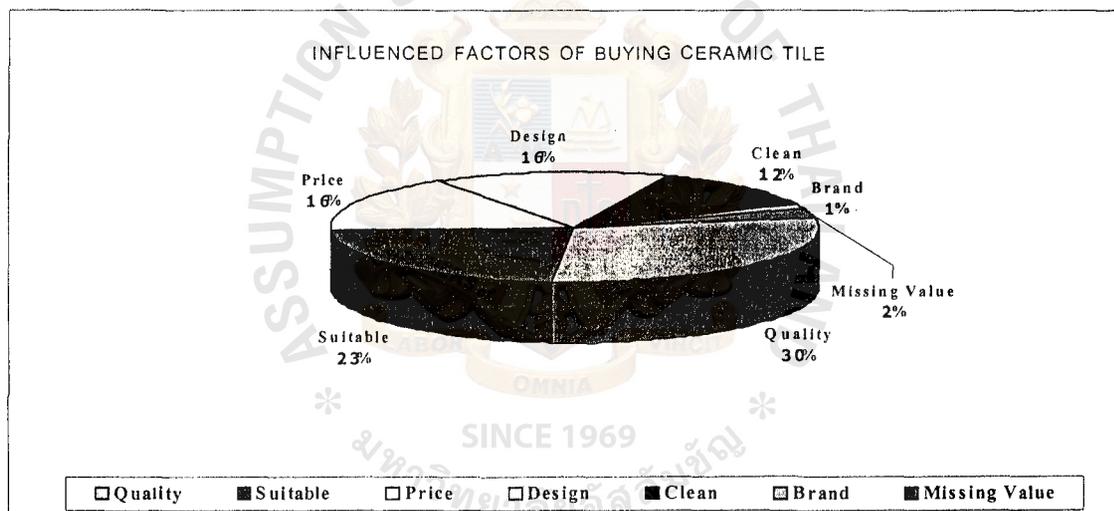


Figure 4.2. Influenced Factors of Buying Ceramic Tile.

The important factors that consumers will consider when buying the ceramic tile. The first one is quality 29.3%, the second one is suitable of usage, and the price come to the third factor at 16.3%.

From the survey, quality is the most important factor that people will consider. This is because the ceramic tile is the construction material that can treat as a durable product that we will use for the long time, so people will pay attention to the quality first. This is reasonable; the house is the big asset that we have to live with for a long time and the most important thing for the people. The quality surely comes the first. The marketing strategy will try to create the confidence in the quality of our products.

The second factor is suitability. The purpose of that area, wall tile, floor tile, granito tile, etc. has the different purpose and suitable to each place differently. Cotto has the tile in every segment and this is the big advantage that we can provide the product in every usage to the consumers no matter where are they are going to use. It is like the one stop shopping those consumers can buy the Cotto tile for all areas of their house. If we can segment the products and develop the tile to match in each area and different usage, we can satisfy customers' needs.

The third factor is price, which is the first reason that people do not use tile. It is better that people who consider buying tile does not consider price as the major factor, because Cotto set the premium pricing strategy which is higher than competitors. This is because of the high image and the better quality, so this consumer behavior is the advantage to our strategy, that consumers will consider quality and the suitability first. Cotto tries to avoid the price war in the industry that has happened in the past, and now some manufacturers still use the low price as a strategy to penetrate the market. This survey ensures that we are going to the right way and we do not use the price as a strategy. The better price can make more profit to the company, and do not have to dump the price to fight with the other low price competitors.

Table 4.4. Result of Influenced Person of Buying Ceramic Tile.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
self * no2	388	97.0%	12	3.0%	400	100.0%
member * no2	386	96.5%	14	3.5%	400	100.0%
friend * no2	386	96.5%	14	3.5%	400	100.0%
architec * no2	386	96.5%	14	3.5%	400	100.0%
sales * no2	386	96.5%	14	3.5%	400	100.0%
takeall * no2	386	96.5%	14	3.5%	400	100.0%
other * no2	358	89.5%	42	10.5%	400	100.0%

self * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
self	no	23	130	153
	yes	27	208	235
Total		50	338	388

member * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
member	no	8	55	63
	yes	40	280	320
Total		48	338	386

friend * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
friend	no	35	296	331
	yes	13	42	55
Total		48	338	386

Table 4.4. Result of Influenced Person of Buying Ceramic Tile. (Continued)

architec * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
architec	no	34	242	276
	yes	14	96	110
Total		48	338	386

sales * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
sales	no	48	325	373
	yes		13	13
Total		48	338	386

takeall * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
takeall	no	42	273	315
	yes	6	65	71
Total		48	338	386

other * no2 Crosstabulation

Count

		no2		Total
		non-use	use	
other	no	46	304	350
	yes	2	6	8
Total		48	310	358

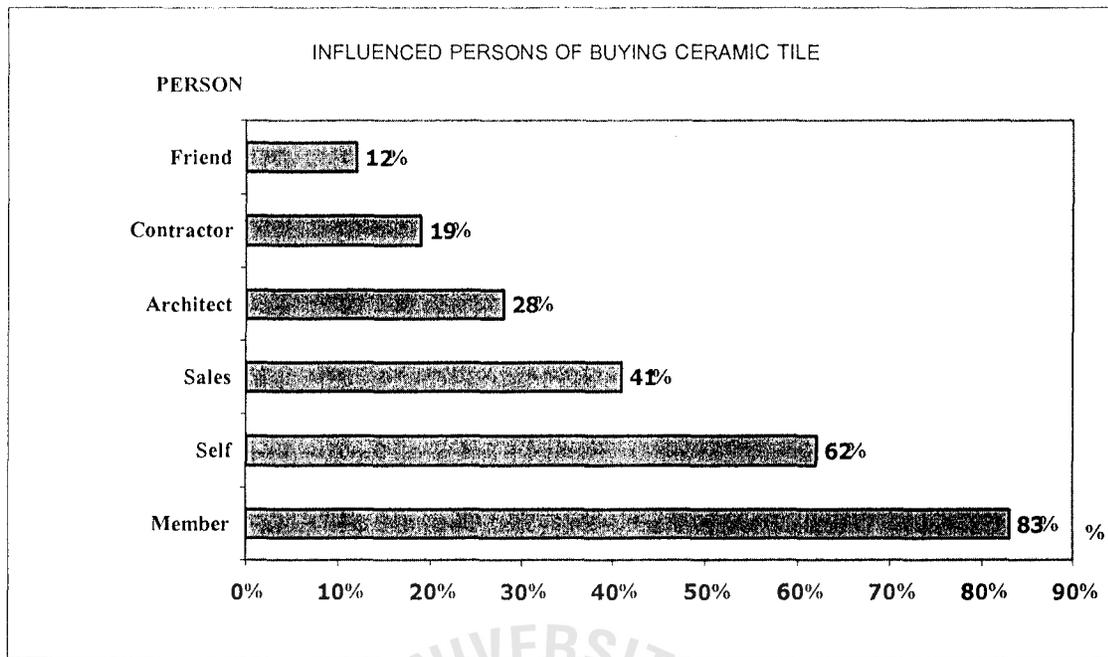


Figure 4.3. Influenced Person of Buying Ceramic Tile.

Building the house is the big thing that will consider many factors in the decision-making. Other people are also influenced and effect feeling, attitudes, and behaviors of consumer also. The result shows that family is the influencer about 83%, and decided by himself or herself at 62%, sales at 41%, architect 28%, contractor at 19%, and friends about 12.1%. This finding will help us to know the marketing activities that should go direct at which group, not just only end-users.

In this survey shows that people themselves and their family have the most influence in decision. It is the normal nature that people in the house or family will participate in the decision-making. This group of people also treated as the end-users and the marketing activities also direct to this group.

For the first party that is not in the family or the end users is the sales staff of the store. This is the one who will suggest the customers about what the customers looking

for and offer the suitable one. Technically, the customers do not have much knowledge about the ceramic tile, so these sales staff will offer to assist to select the suitable tile, or specify brand for the customers. If we can provide knowledge or can build the Cotto brand in these sales staff's mind, to present the better quality of Cotto tile to the customers, it is our strength. Now we have the programs for these sales staff such as seminar for the product knowledge, or sales target for gifts. These programs will help to familiar sales staff and Cotto brand like working together. The sales staffs are more willing to suggest Cotto brand the customers, when customers need any suggestion for the tile.

For the architect and contractor, this is the consultant and building part. This is the one who designs and provides technical knowledge for the construction. This is the one who can specify the materials, design, or anything that can be used in the house and the building.

Table 4.5. Result of Brand Awareness of Ceramic Tile.

Statistics

		highest	medium	low
N	Valid	378	306	133
	Missing	22	94	267

highest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	cotto	328	82.0	86.8	86.8
	campana	31	7.8	8.2	95.0
	umi	2	.5	.5	95.5
	rci	13	3.3	3.4	98.9
	12.00	2	.5	.5	99.5
	13.00	2	.5	.5	100.0
	Total	378	94.5	100.0	
Missing	System	22	5.5		
Total		400	100.0		

Table 4.5. Result of Brand Awareness of Ceramic Tile. (Continued)

medium

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	22	5.5	7.2	7.2
	cotto	51	12.8	16.7	23.9
	campana	166	41.5	54.2	78.1
	umi	21	5.3	6.9	85.0
	rci	8	2.0	2.6	87.6
	tile top	2	.5	.7	88.2
	sosugo	36	9.0	11.8	100.0
	Total	306	76.5	100.0	
Missing	System	94	23.5		
Total		400	100.0		

low

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	22	5.5	16.5	16.5
	campana	30	7.5	22.6	39.1
	umi	25	6.3	18.8	57.9
	rci	15	3.8	11.3	69.2
	sosugo	41	10.3	30.8	100.0
	Total	133	33.3	100.0	
Missing	System	267	66.8		
Total		400	100.0		

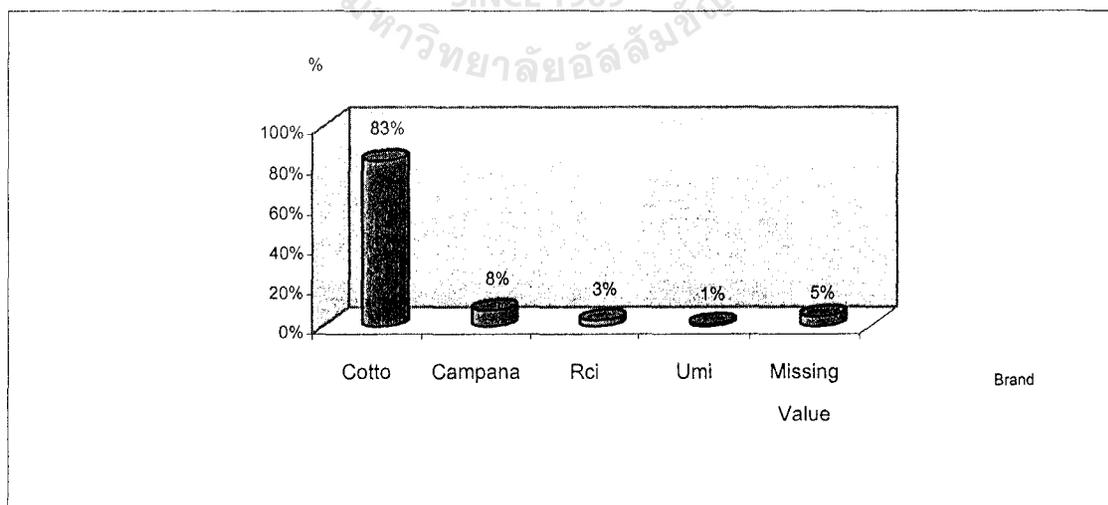


Figure 4.4. Brand Awareness of Ceramic Tile.

From the survey of the brand awareness of ceramic tile industry, Cotto brand gains the brand awareness of 83%, which is much higher than other competitors in the industry. The second one is Campana at 8%, RCI 3%, and UMI at 1%.

The brand Cotto gains acceptance the brand awareness in the very high percentage, this is because Cotto does the PR, and promotion, and advertising continuously for the last 3 years, and it achieves. Although Cotto gains the highest brand awareness, Cotto should continuously do the advertising and PR in order to reserve the level of brand perception for the long time and at the same time Cotto should do more on building brand image. The brand image and brand awareness should go together. If Cotto got brand awareness but low in brand image is useless or may be negative.

Now we do brand image for the public such as we will design and provide the Cotto tile to decorate for the police station at the intersections. This will build image for the Cotto tile that provide to the public and at the same time we can do the display at the police station that Cotto tile can use in many places. We do often provide the grade B product to the temple, to the community and help the public all the time. These activities will build the Cotto brand awareness and brand image in the people's mind.

Table 4.6. Result of Perception of Cotto Tile from Various Medias.

Statistics

		movie	radio	newspep	board	used	magazine
N	Valid	398	398	396	396	394	392
	Missing	2	2	4	4	6	8

Table 4.6. Result of Perception of Cotto Tile from Various Medias. (Continued)

movie

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	78	19.5	19.6	19.6
	yes	320	80.0	80.4	100.0
	Total	398	99.5	100.0	
Missing	System	2	.5		
Total		400	100.0		

radio

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	325	81.3	81.7	81.7
	yes	73	18.3	18.3	100.0
	Total	398	99.5	100.0	
Missing	System	2	.5		
Total		400	100.0		

newspap

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	210	52.5	53.0	53.0
	yes	186	46.5	47.0	100.0
	Total	396	99.0	100.0	
Missing	System	4	1.0		
Total		400	100.0		

board

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	299	74.8	75.5	75.5
	yes	97	24.3	24.5	100.0
	Total	396	99.0	100.0	
Missing	System	4	1.0		
Total		400	100.0		

used

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	191	47.8	48.5	48.5
	use	203	50.8	51.5	100.0
	Total	394	98.5	100.0	
Missing	System	6	1.5		
Total		400	100.0		

Table 4.6. Result of Perception of Cotto Tile from Various Medias. (Continued)

		magazine			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	180	45.0	45.9	45.9
	yes	212	53.0	54.1	100.0
	Total	392	98.0	100.0	
Missing	System	8	2.0		
Total		400	100.0		

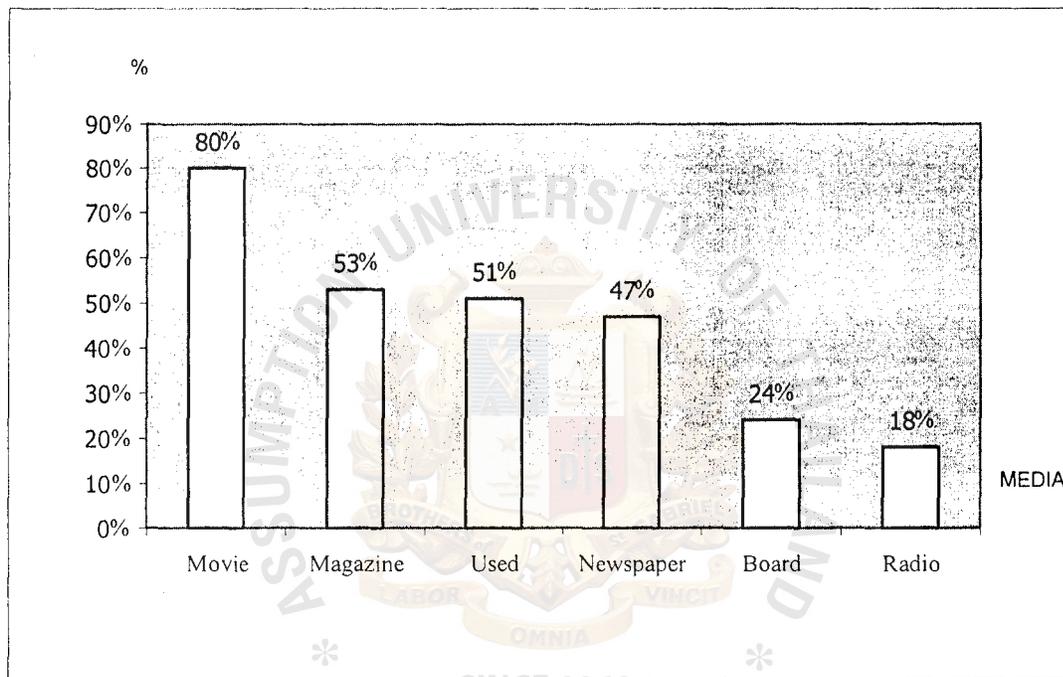


Figure 4.5. Perception of Cotto Tile from Various Medias.

For the medias, people will be aware of the Cotto brand through many medias. The advertising television is the media that people most perceive the Cotto brand at 80%, the magazine, used to use the Cotto product, and newspaper is the second, third, and fourth at 53%, 51% and 47% respectively. The billboard comes to the fifth and the last one is radio.

The customers know the Cotto brand through the TV implied that the TV advertising achieves the target and the advertising is easy to remember and understand about the Cotto tile. The feeling the Different campaign that broadcast to the market can catch the attention from the viewer and know that it is the Cotto tile. It is the good channel for general people to build the brand awareness in the customer's mind. Anyway, the cost is very high compared to other medias such as the magazines or the newspapers. The most of brand awareness of Cotto brand at 83% comes from this channel 80%.

For the magazines, this media direct to the specific market, or the group of customers. The 53% of this media is good news that customers looking for building the house or the building will be aware of the Cotto brand in the magazine. Most magazines that Cotto advertise is in the house and decorative magazine, that is direct to the prospect customers who are looking for the ceramic tile. It is the good channel that can affect the sales and the awareness of the ceramic tile when people are looking for the house or decorate it.

About 51% or half of the respondents used to use the Cotto tile. This shows that more than 50% of people already used the Cotto tile and this information shows that people know the Cotto for the long time and accept in the market.

Table 4.7. Result of Brand Awareness from Each Media Channel.

Statistics

		movie	radio	newspap	board	used	magazine
N	Valid	398	398	396	396	394	392
	Missing	2	2	4	4	6	8

Table 4.7. Result of Brand Awareness from Each Media Channel. (Continued)

movie

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	78	19.5	19.6	19.6
	yes	320	80.0	80.4	100.0
	Total	398	99.5	100.0	
Missing	System	2	.5		
Total		400	100.0		

radio

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	325	81.3	81.7	81.7
	yes	73	18.3	18.3	100.0
	Total	398	99.5	100.0	
Missing	System	2	.5		
Total		400	100.0		

newspap

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	210	52.5	53.0	53.0
	yes	186	46.5	47.0	100.0
	Total	396	99.0	100.0	
Missing	System	4	1.0		
Total		400	100.0		

board

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	299	74.8	75.5	75.5
	yes	97	24.3	24.5	100.0
	Total	396	99.0	100.0	
Missing	System	4	1.0		
Total		400	100.0		

used

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	191	47.8	48.5	48.5
	use	203	50.8	51.5	100.0
	Total	394	98.5	100.0	
Missing	System	6	1.5		
Total		400	100.0		

Table 4.7. Result of Brand Awareness from Each Media Channel. (Continued)

		magazine			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	180	45.0	45.9	45.9
	yes	212	53.0	54.1	100.0
	Total	392	98.0	100.0	
Missing	System	8	2.0		
Total		400	100.0		

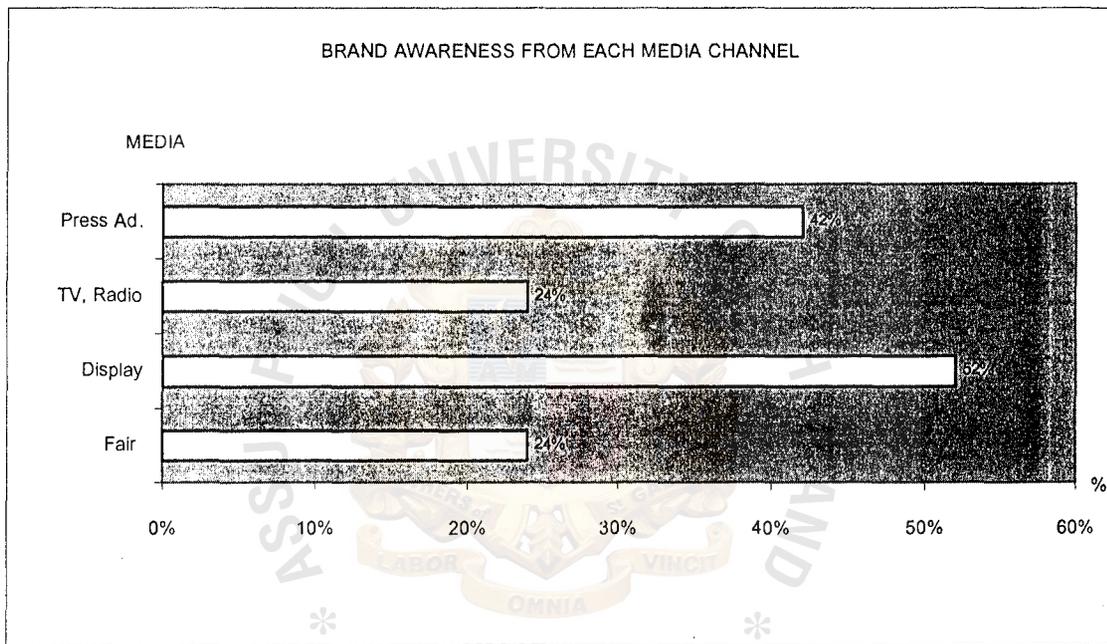


Figure 4.6. Brand Awareness from Each Media.

Now Cotto uses press ad for promoting the rustic tile, which is the natural design as the wood, stone, or the marble. This is because this trend of these few years, people will be back to the natural so Cotto has produced the natural tile to satisfy the market instead of the real natural one. The better qualification of the ceramic tile is a good point that is the advantage to the natural one. It is the one that differentiates Cotto's product from other competitors that can ask for the higher price.

From the survey of this promoting, we found that mostly people will know about the rustic tile from the display at 52%, from press advertising from many magazines at 42%, and from TV, radio and the fair at the same proportion at 24%.

It is surprising that the best channel that makes people know the rustic tile is the display at the Cotto's agents. Only the big agents will bring this kind of tile to display because the target of this tile is the middle to high market segment. This imply that most people in Bangkok will go to the big shop when considering to buy the ceramic tile, so they will see this rustic tile. This shows that Cotto has the good displays that make customers recognize it well. The display will help Cotto to promote the rustic tile with the lowest cost. The company will just provide the sample tile for our agent customers to display this product and it can advertise by itself. The company does not have to pay more for airtime, for press ad, or the commercial medias.

The second one is the press medias or the magazines. 42% is the perception that people know the rustic tile from magazine. This is the specific group for the prospect customers going the buy the ceramic tile or building the house in the near future. In addition, we have to inform the customers in the magazines also where they can get it if they like it.

The TV ad is the third one that people know the rustic tile. Cotto put more ad on TV, but it comes at the third place, this imply that people know the Cotto advertising but do not recognize what it is.

So it is better to put stress on display and magazine that is lower cost than TV ad, but people recognize it more. For the TV ad we should pay attention to the brand image and brand awareness.

Table 4.8. Result of Feeling toward Marble& Rustic Collection.

Statistics

like		
N	Valid	388
	Missing	12

like		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	best	32	8.0	8.2	8.2
	like	170	42.5	43.8	52.1
	soso	180	45.0	46.4	98.5
	don't like	6	1.5	1.5	100.0
	Total	388	97.0	100.0	
Missing	System	12	3.0		
Total		400	100.0		

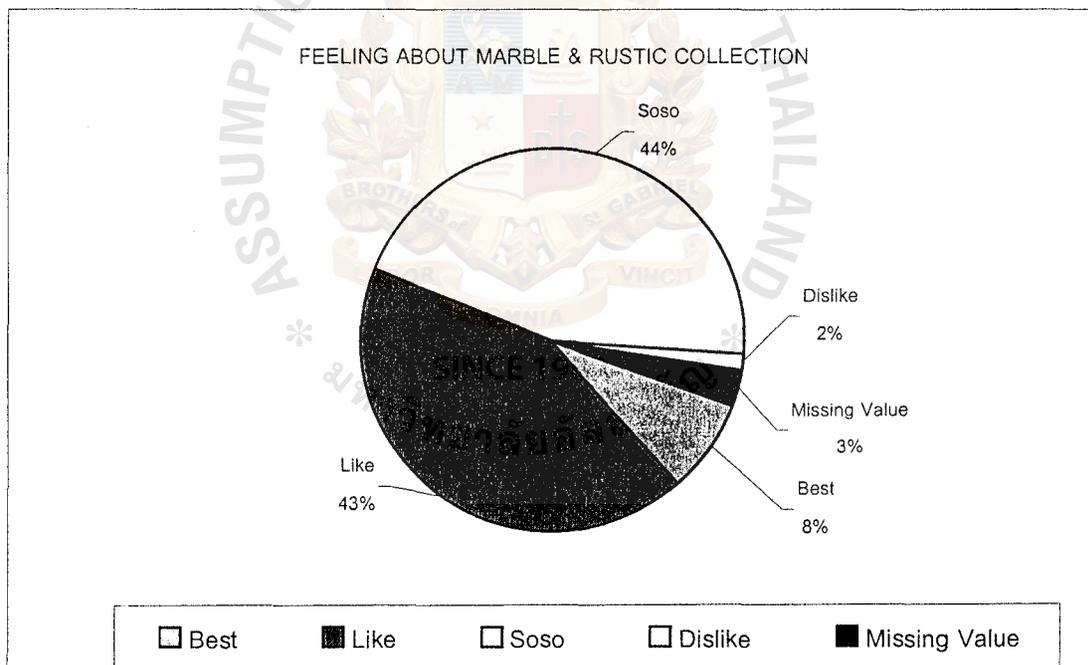


Figure 4.7. Feeling toward Marble and Rustic Collection.

For the feeling of the new trend of rustic tile, we found that most people feel.. at 45%, and like it at 43%, strongly like at 8%, and dislike at 2%.

This is because consumers are just aware about the rustic tile, but do not recognize about the good point or the beauty of the product. Some consumers still think that the real natural is better or do not feel good for the duplicated one. So the perception of this rustic tile is not quite successful. 51% of consumers like it and only 2% do not like it. It is good news for the new direction that people will go to use the rustic tile for the house. It is the good because it is the trend that Cotto set to differentiate from other producers in order to avoid the price war and ask for the something new and different and is the leader for the ceramic industry.

Table 4.9. Result of Proportion of Ceramic Tile Distribution.

Statistics

		cementha	homepro	homework	boon	near	ratchada	others
N	Valid	388	388	386	386	386	386	306
	Missing	12	12	14	14	14	14	94

cementha

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	324	81.0	83.5	83.5
	yes	64	16.0	16.5	100.0
	Total	388	97.0	100.0	
Missing	System	12	3.0		
Total		400	100.0		

homepro

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	266	66.5	68.6	68.6
	yes	122	30.5	31.4	100.0
	Total	388	97.0	100.0	
Missing	System	12	3.0		
Total		400	100.0		

Table 4.9. Result of Proportion of Ceramic Tile Distribution (Continued).

homework

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	375	93.8	97.2	97.2
	yes	11	2.8	2.8	100.0
	Total	386	96.5	100.0	
Missing	System	14	3.5		
Total		400	100.0		

boon

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	213	53.3	55.2	55.2
	yes	173	43.3	44.8	100.0
	Total	386	96.5	100.0	
Missing	System	14	3.5		
Total		400	100.0		

near

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	233	58.3	60.4	60.4
	yes	153	38.3	39.6	100.0
	Total	386	96.5	100.0	
Missing	System	14	3.5		
Total		400	100.0		

ratchada

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	320	80.0	82.9	82.9
	yes	66	16.5	17.1	100.0
	Total	386	96.5	100.0	
Missing	System	14	3.5		
Total		400	100.0		

others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	302	75.5	98.7	98.7
	yes	4	1.0	1.3	100.0
	Total	306	76.5	100.0	
Missing	System	94	23.5		
Total		400	100.0		

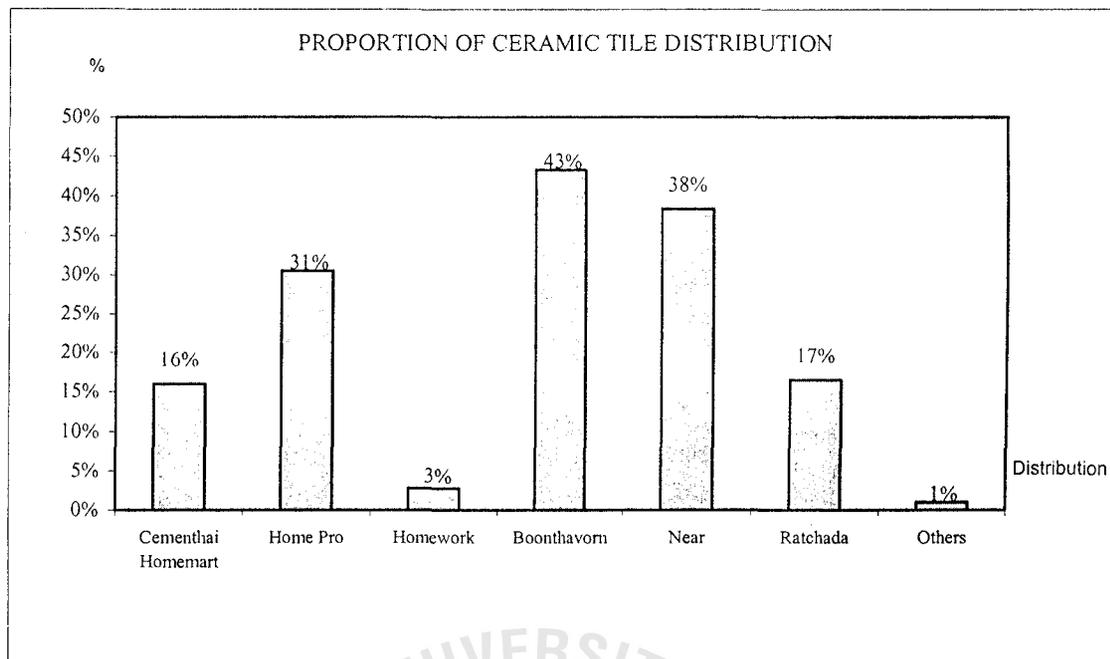


Figure 4.8. Proportion of Ceramic Tile Distribution.

For the place that consumers will go to buy the ceramic tile, the top one is Boonthavorn 43%, the shop near the house is the second at 38%, the third one is Home Pro, shopping around Ratchada road at 17%, and Cementhai Homemart at 16%.

Boonthavorn still is number one of the shop when people want to buy the construction or decorative materials. 43% of Bangkokian will go to Boonthavorn for shopping. This is the good channel that we should pay attention to this shop because mostly target customers will go to see the tile in this shop. Anyway, now Boonthavorn has imported the ceramic tile to see in the shop and it reduces the display space for the Cotto tiles.

The shop near the house is the second choice that people will go to, it is convenient to go and easy for the delivery or easy to claim for any problem. So we can have more shop that sell Cotto tile, we should improve the sales so much. Because of

the bad traffic in Bangkok, people will consider the shop that is near to their house for their convenience.

HomePro and Cementhai Homemart is the same concept shop that people will go to for the one stop shopping that consumers can buy for many things in one shop.

All Cotto tiles are sold by the agents, and it is hard to control. The biggest one is Boonthavorn , which tries to import ceramic tile from Italy and Spain to sell in the shop and replace the display for the Cotto tile. For the shop near the house and any agents, it is not in company's control. We should set our own showrooms or displays for the Cotto tile only in order to not to rely on the agents too much. This gallery will build the brand image and can help consumers to see the design and pattern made by Cotto tile. We may have our own designers to design for the end users by using the ceramic tile according to the plan.

Table 4.10. Result of Decision of Buying Marble and Rustic Collection.

Statistics

buy

N	Valid		385
	Missing		15

buy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	72	18.0	18.7	18.7
	yes	313	78.3	81.3	100.0
	Total	385	96.3	100.0	
Missing	System	15	3.8		
Total		400	100.0		

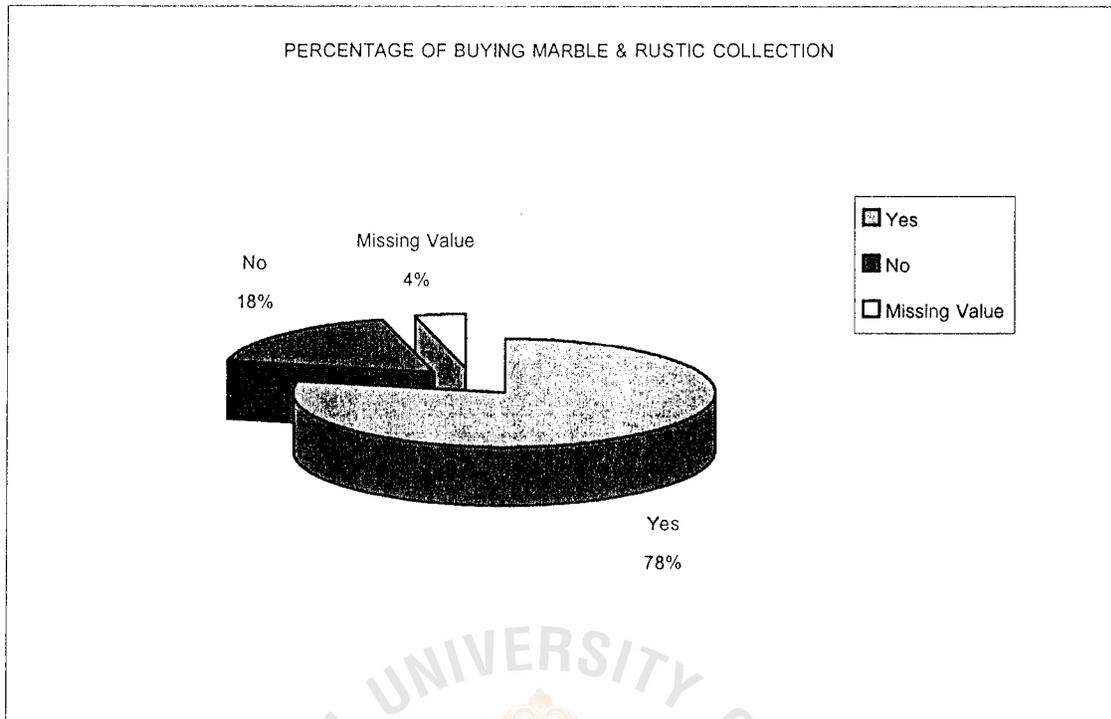


Figure 4.9. Percentage of Buying Marble and Rustic Collection.

For this survey, 78% people say that they will buy the rustic tile and 18% does not buy it because they want the real natural one.

Although, the survey shows that most people feel indifferent for the rustic tile, 78% will buy it. This is because the people do not care that it is the rustic tile or not, but they buy it because they trust the brand Cotto. Now we are the leader of the trend now and we can set the direction for the ceramic tile in the future.

4.2 Analysis of External Factor

4.2.1 Economic Factor

Declaring of GDP recently form The National Economic and Social Development states that the first quarter of year 2002 has the growth rate at 1.8% from the same period of last year. This is the lowest growth rate since the first quarter of 1999. Then

the trend and risk of Thai Economy for the rest of year 2002 have been concluded that Thai economy is confronting with the risk of saturation as the result of exporting saturation. And the growth ratio of the economy for the whole year will be 1-2% whereas the growth ratio for the rest of the quarters will be decreased lower than 1.8% of the first quarter. Moreover, with that saturation and reducing of exporting will affect to Thai money value.

For the next year, 2003, the condition will be better in the property industry. The government has many policies to support the property such as the low interest loan, the low price project. A lot of investment will be more on the property by government and the policy also attract the foreign investment. More construction of the real estate come from the increased capability to pay to stimulate the needs of demand. People will have more money to renovate the house or buying the new house in the near future.

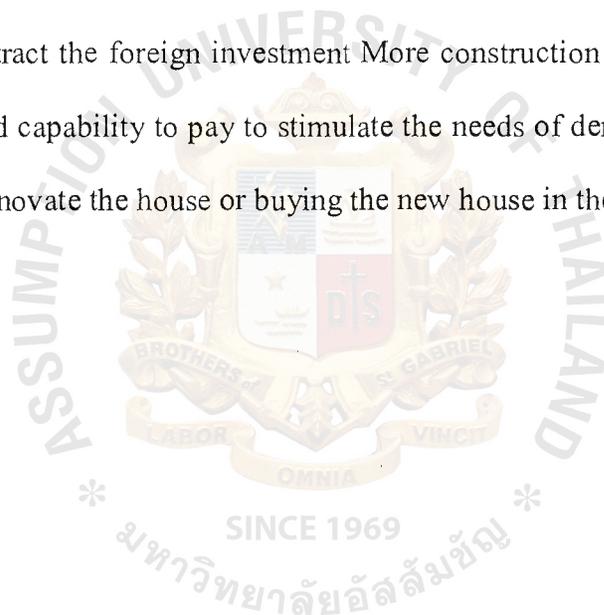


Table 4.11. Estimated Growth Ratio of Thai Economy for 2003.

	2003*	2002
Growth ratio of household demand (% at constant price)	3.00%	4.60%
Growth ratio of investment (% at constant price)	4.00%	5.40%
Growth ratio of public section demand (% at constant price)	6.50%	6.50%
Growth ratio of exporting	-2.00%	19.60%
(Base on BOT. Current value on \$US)		
Growth ratio of importing	2.00%	31.30%
(Base on BOT. Current value on \$US)		
Annual average for total inflation (%)	2.30%	1.60%
Average of Inflation	1.70%	0.70%
Growth ratio of GDP (%)	1.0-2.0%	4.40%

* Estimated by Thai Farmer Bank Research and Development

Table 4.12. GDP Growth Ratio of Thailand Year 2001 and Estimated Year 2002.

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual(2002)
GDP					
Growth Ratio	1.80%	0.3-0.8%	1.3-1.8%	0.7-1.7%	1.0-2.0%

Resource: Thai Farmer Bank Research and Development

According to the economic situation of the year 2001, several industries are still in the saturation of the growth national income for lower than 2% due to the saturation of exporting. However, both floor tiles and wall tiles have grown from 2000 for higher than 14% as the result of many factors.

- (1) The graph shows the demand of ceramic tiles with the trend of increasing in demand.

- (2) The manufacturer has the promotion for all levels to be accepted for its multi-usages. Therefore, it has grown higher than other industries.

4.2.2 Social and Environment Factor

Tiles are the construction material used for decorating both external and internal of building to serve for:

- (1) Design Function
- (2) Technical Function

Now, there is the increasing of ceramic tiles for decorating to save time, easy to find, raise the social status, which normally compete each other between neighbors.

The tiles are encouraged to be used in other areas beyond the floor and wall. Furthermore, there have been increased usages of external floor and wall tiles instead of using colour. In Italy itself has used the tiles for the purpose of decorating the ceiling.

4.2.3 Technology Factor

In the past, Mosaic tiles were the small ceramic tiles that have been very popular. Due to the small size of tiles, it has a lot of problems in paving. Most of consumer changes their attitude to use more ceramic tiles due to the size, colorful, modern design that is better than mosaic tiles. Ceramic tiles have been developed to make more attractive in various design such as marble design, flower design, graphic design together with various colors (normal colour, sparkle colour, golden colour, platinum color, imitate antiques color). Company also uses special techniques to add the value to the product both in the quality and efficiency such as Abrasion Resistance, Anti-Slip, Anti-Bacteria, Self-Cleaning. For future trend, big ceramic tiles and imitate antiques tiles will be very popular in tiles industry.

The new technology is brought from many manufacturers to compete in the market. The marble look, rustic look, big size wall tile, rectified tile, new trend colour are coming to the market following the technology from the European countries.

4.2.4 Political, Laws and Regulation Factor

- (1) Reduction of importing raw material on January 1, 1997 which comprises of several raw materials such as 10% reduction of Zinc Oxide, 5% for Clay, Zirconium Silicate and Albeit 90 Lining and etc.
- (2) AFTA agreement between 10 countries in Asian, Indonesia, Philippine, Brunei, Malaysia, Singapore, Vietnam, Laos, Myanmar, Cambodia, and Thailand, to reduce the import tax from 0-5 percent within 10 years started from January 1, 1993 and finish in year 2003. Except new member such as Vietnam, which will reduce tax to be 0-5 percent in year 2006. Laos, Cambodia, Myanmar in year 2008.
- (3) Financial policy of the government that effects the investment in property. The load interest, NPL, cash flow, and the foreign investment.

4.3 Situation Analysis*

4.3.1 Five Force Analysis

FIVE FORCE ANALYSIS

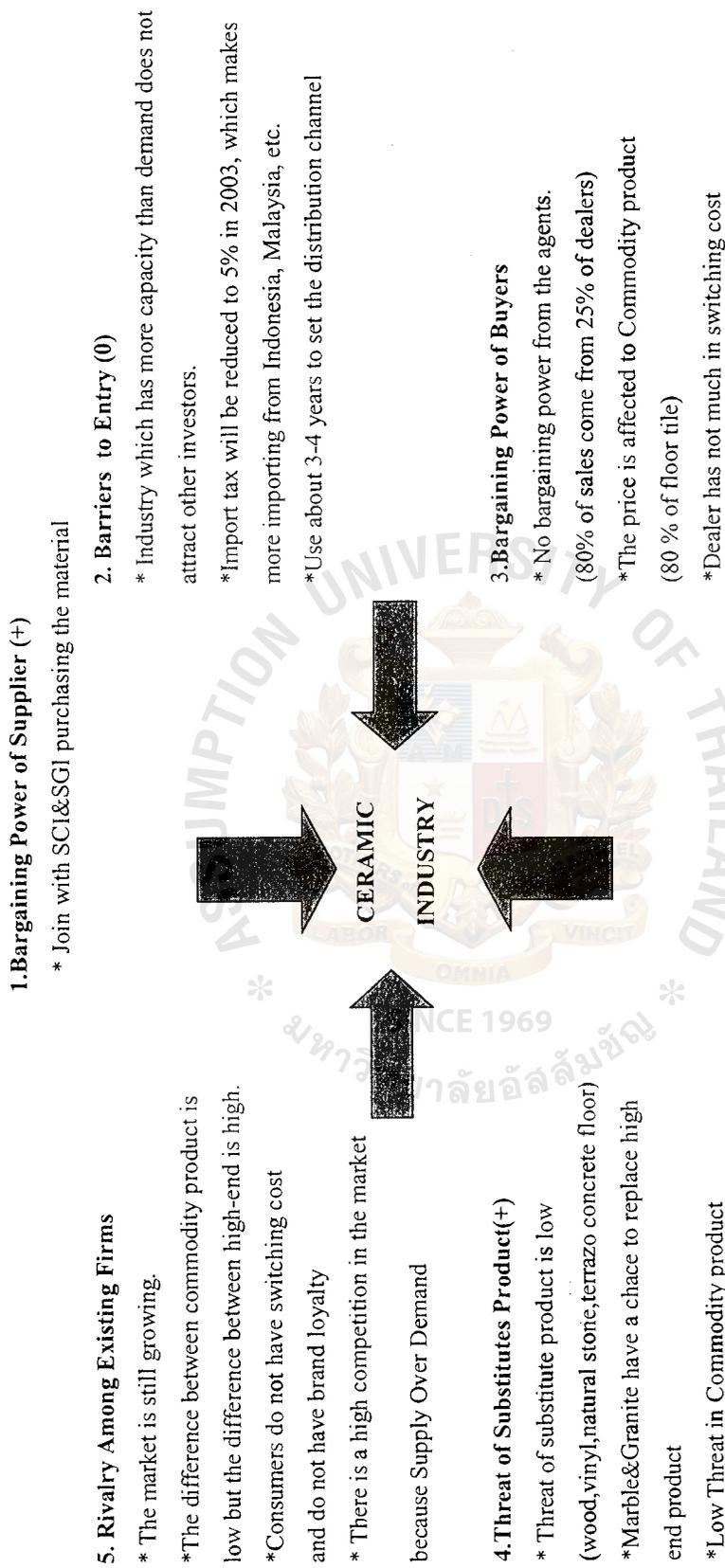


Figure 4.10. Five Forces Analysis.

4.3.2 Domestic Market

There are 5-6 big local manufacturers in Thailand. Cotto is the biggest one. The total production is more than 100 million square meter per year, while the consumption is much less. So the market is very competitive and many producers use the pricing strategy to fight in the market.

A lot of tiles are imported to the market for the better quality from Italy and Spain. The import tax is about 5% and reducing according the AFTA agreement. This is the reason that the imported tiles from Malaysia or Indonesia come to the market cheaper because of low cost of material. While the import of material is still at 30%, so it is cheaper to import the finished product than import the raw material to produce. Now there are some manufacturers that import the tile from other countries to sell with the produced one.

The distribution channel mostly is through agents, but some producers have set their own outlet to sell their products.

The promotion mostly is on debate for the large lot of purchase in order to lower the cost. Another one is to set the target to travel in foreign countries for the agent. This is why there is a high competition in the market.

Related Industry Environment

(1) Real Property Business

During the period of 2001-2010, there will be a lot of interesting developments such as the real property developers will adapt themselves and their marketing strategies to cope with the real property market, which is recovering from the period of 1997-1998. In that period, the real property business had receded dramatically. Then in 1999, the business show sign of

recovery and was stabilizing in 2000. It is expected the market will be moving toward a new equilibrium during 2001-2002.

Opportunities in Real Property Business:

(a) Low Interest Rate

The rate of interest for housing loan is very low at 4.5-8.0 in this year and continue at this low level in the next 2-3 years.

(b) Oversupply

There are a lot of supplies for unsold project, so they try to sell their unsold project by reducing the price.

(c) Bank Focusing on Housing Loan

Due to the high liquidity in financial system, Bank tries to attract retail customer by providing low-rate housing loan with special condition.

(d) Auction Sales System

To stimulate the competition among buyers, the real property companies adopt auction sales system to sell their project.

(e) Special Price Campaign

The unsold unit will be offered at special low price in a fixed period of time.

(f) Government Policy

Government reduce the property transfer tax from 2% to 0.01%, special business tax from 3.3% to 0.11%

Threats in Real Property Business:

NPL Problem

Most of the real property developers are in the process of debt restructuring. The customer is unwilling to buy from the project which have not finished the debt restructuring.

Real property market is still in recession stage

Buyers have lower purchasing power and are very cautious in committing to long-term investment.

Low Liquidity of real property developer

Many developers lack working capital to further develop or finish the project.

(2) House Construction Business

The outlook for House Construction Business is better in 2001, with the following 4 supporting factors

(a) Low Interest Rate

The rate of interest has been adjusted downward continuously, resulting in more purchasing power. In addition, the government has continuously announced measures to rehabilitate real property business.

(b) House is Basic Needs

Due to house being one of the basic needs of human beings, the real demand of house continues to increase.

(c) Contract Default of real property developers

Several developers have defaulted on house selling contract, resulting in their bad image. So, some homebuyers turn to construct their own house.

(d) The Recovery of Economic Outlook

People have more confidence in buying house due to the recovery of economy. Most of them turn to construct their own house.

Trend of Ceramic Tiles Industry

Ceramic Tiles Industry still has the chance to grow and expand in the future because many countries in the globe now have the lower ratio of ceramic tiles demand per person per year. For instance, the Asian countries have the highest demand on ceramic tiles in the world. Ceramic tiles themselves have some trend of fashion which having developed the design, colour to be up to date. With a lot of sizes, easy to clean, multi-purposes for internal and external of building such as rest room, kitchen, playing room, car parking area, path, pool and etc. Because of having varieties of products and multi-usages, ceramic tiles can be used for other products as well. This is for both medium-high class and medium-working class such as in medium-high, they will be used for marble, carpet, parquet, solid wood, terrazzo, finish floor, and medium-low class is used for vinyl floor, ceramic floor, local ceramic floor (Daan-Kwein Ceramic). Not only that the wall ceramic can be used for painting, wall paper and etc.

Stage of Product Life Cycle

The ceramic tile is now in the growth stage again. Because in the past, many companies compete with the price only. Every company tried to dump the price even though it was lower than cost. This makes many companies close the company permanently. Now the ceramic industry comes again with the new technologies from

aboard, leading ceramic countries in the world. Most companies invest much in the research and development to make the new style tile and the new production techniques to present something to the customers.

Marble looks and rustic tiles come to be the new style in the Thai market, and also the export market. We do not intend in the price war again and focus to the new development. Competitors try to bring the new product almost every day, so we have to develop all the time in order to survive in the market.

The market characteristic is high growth in the market, and still growing in the future. Most money is invested in the development and research to get competitive advantages. High competition and demand still higher and higher because the economy is better, people are confident to invest in the property.

For the knowledge of consumer, there is not much knowledge for the product, the customers cannot know the quality and the technical knowledge of using the tile and which one they should choose among many brands. Mostly the tile installer, friends, relatives, and the staff of the shop is the major influence of the decision buying as to which brand they will choose.

The Import of Ceramic Tile

Ceramic tile is according to the custom code no. 6907 and 6908 as the following detail:

6907: floor tile and wall tile that is unglazed or unglazed ceramic

6908: floor and wall tile include mosaic tile and all glazed ceramic

Importation

Table 4.13. Importation of Ceramic Tile during 1997-2001.

Custom code	1997	1998		1999		2000			2001	
	Sqm.	Sqm.	% GR	Sqm.	% GR	Sqm.	% Ratio	% GR	Sqm.	% GR
6907	564,815	5,741	-99	6,678	16	5,836	1	-13	124,866	2,040
6908	827,566	398,301	-52	184,089	-54	623,055	99	238	6,930,447	1,012
Total	1,392,381	404,042	-71	190,767	-53	628,891		230	7,055,313	1,022

Table 4.14. Import value of Ceramic Tile during 1997 – 2001.

Custom code	1997		1998		1999		2000		2001	
	Baht	B./sqm	Baht	B./sqm	Baht	B./sqm	Baht	B./sqm	Baht	B./sqm
6907	2,154,447	4	878,447	153	255,110	38	3,261,449	559	24,686,047	198
6908	128,393,715	155	106,218,166	267	74,931,536	47	99,306,353	159	194,170,608	28
Total	130,548,162	94	107,096,613	266	75,186,646	39	102,567,802	163	218,856,655	31

Table 4.15. The Trading Partner of Imported Tile in Thailand Year 2001.

COUNTRY	IMPORT QUANTITY (SQ.M.)		
	SQ.M.	BAHT	BAHT/SQ.M.
1. SPAIN	1,408,866	79,074,667	56
2. ITALY	5,250,631	77,640,081	15
3. INDONESIA	110,710	22,058,942	199
4. CHINA	115,043	21,669,169	188
5. USA	3,123	4,043,207	1,295
6. TAIWAN	63,417	845,814	13
7. MALAYSIA	899	764,687	851
8. GERMANY	5,274	633,631	120
9. JAPAN	542	580,016	1,070
10. VIETNAM	2,067	565,352	274

From Table 4.13, it shows that the import of ceramic tile during 1997 – 2001 has uncertain quantity. In year 1998 and 1999 the quantity was much decreased compared to the year 1997, which has imported 1,392,381 sq.m. This may be the caused of the slowdown in economy and high interest rate that affect the construction industry. The import of year 2000 until April 2001 is better and the quantity is as much as 700,214 sq.m.

For the information, the code shows that the import of glazed ceramic tile is much higher than unglazed one, about 95% in every year.

From Table 4.14, the information shows that the average price per square metre in year 2001 the average value is at 394 baht/ sq.m. We can assume that at that time Thailand has imported the high value tile that contrast in year 1997 that the average value is only 94 baht/ sq.m. so this should be the import of commodity tile.

In year 2001, the baht per square meter reduces to only 31 bahts. This show that most imported tile is the low price product which may come from ASEAN manufacturers as Indonesia or Malaysia. This is the sign that we have to be aware about the domestic market.

This imported tile is the major competitor of the market now. In the past, importer imported the low cost tile to sell in the market, that use the price as the strategy. Nowadays, importers import from the Italy, Spain, and other European countries that focus on the quality and the new technology that Thai manufacturer cannot produce now, although it is the high price.

4.3.3 Export Market (ASEAN Market)

Exportation

Table 4.16. Export Quantity of Ceramic Tile during 1997 – 2001.

Custom code	1997	1998		1999		2000		2001	
	Sqm.	Sqm.	% GR	Sqm.	% GR	Sqm.	% GR	Sqm.	% GR
6907	171,111	809,452	373	847,683	5	402,774	-52	250,774	-38
6908	6,294,692	33,725,862	436	19,865,517	-41	17,317,576	-13	17,438,521	1
Total	6,465,803	34,535,314	434	20,713,200	-40	17,720,350	-51	17,689,295	0

Table 4.17. Export Value of Ceramic Tile during 1997 – 2001.

Custom code	1997		1998		1999		2000		2001	
	Baht	B / s q m	Baht	B / s q m	Baht	B / s q m	Baht	B / s q m	Baht	B / s q m
6907	62,752,106	367	108,408,828	134	108,458,648	128	76,596,429	190	62,177,433	248
6908	816,635,120	130	1,318,953,173	399	1,693,656,391	85	2,001,373,803	166	2,275,944,185	131
Total	879,387,226	136	1,427,362,001	411	1,802,115,039	113	2,077,970,232	176	2,338,121,618	179

Table 4.18. The Export Quantity and Value of Ceramic Tile in Year 2001.

COUNTRIES	EXPORT QUANTITY (SQ.M.)		
	SQ.M.	BAHT	BAHT/SQ.M.
1. USA	3,056,388	448,380,931	147
2. CAMBODIA	2,951,118	331,579,437	112
3. AUSTRALIA	1,361,899	274,355,744	201
4. LAOS	1,665,181	175,978,277	106
5. MYANMAR	2,384,347	149,190,115	63
6. SOUTH KOREA	1,146,271	137,296,986	120
7. ENGLAND	353,265	92,283,303	261
8. JAPAN	268,540	82,272,865	306
9. BRUNEI	482,062	71,303,897	148
10. MALAYSIA	365,603	58,653,827	160

From the Table 4.16, we can see that the export in year 1998 is much more than in year 1999 because of the float rate currency of Thai Baht. It made Thai manufacturers compete in the export market well. But after year 1999, the export was decreasing until year 2001 is very close to year 2000, but the baht per square meter is increased from 117 to 132 bahts per square meter. This means that now the high value product is exported to export market more than before. This is the good point that now the market can compete in the product and the quality more than the price only, which is the marketing strategy of COTTO tiles that try to compete in the upper market, try to differentiated products from others and can ask for the higher price rather than reduce the price to fight with the commodity tile.

From the Table 4.18, we can see the trading partner of Thailand for the export of ceramic tile 5 from 10 countries in ASEAN is in the top 10 countries of the Thailand trading partner. This shows that Cambodia, Laos, Myanmar, Brunei, and Malaysia is the big market for the ceramic market that can be expanded in the near future. Because of ATFA implementation, the cost will be lower and can compete more in ASEAN market.

Table 4.19. The Export Quantity of Ceramic Tile of TCC Preparing with Total Export Quantity in Year 2001.

COUNTRY	TOTAL EXPORT (SQ.M.)	EXPORT OF TCC (SQ.M.)	% TCC OF TOTAL
1. USA	3,056,388*	3,084,876*	-
2. CAMBODIA	2,951,118	836,420	28
3. MYANMAR	2,384,347	436,601	18
4. LAOS	1,665,181	304,234	18
5. AUSTRALIA	1,361,899	505,932	37
6. S.KOREA	1,146,271	217,882	19
7. BRUNEI	486,062	247,800	51
8. MALAYSIA	365,603	278,705	76
9. ENGLAND	353,265	105,675	30
10. JAPAN	268,540	53,590	20

Remark: * information of USA in year 2001 may have some error.

In the table, total export of TCC in Cambodia, Myanmar is still low just 28% and 18% from the total export. These two countries have no local manufacturer, so we can penetrate more in the market in this market. Although the price of China tile is very low, we have to stress on the high end market for the size that does not exist in the market in order to ask for the higher price and gain more market share.

For Brunei, 51% is the good number because Brunei is the free port with 0% import tax. Ceramic tile all over the world will be imported to this country including from Spain and Italy. Now in Brunei, Cotto brand is number one in the market and already is the market leader for the ceramic tile. Anyway we have to try to maintain the market share and penetrate more market to compete with Italy and Spain company even the Asian manufacturer from Malaysia and Indonesia.

Malaysia has a lot of local manufacturers, but we can export to this market because we offer the different ceramic tile. We provide the better quality and different size and design that people cannot find in the local market.

For the export market or ASEAN market, there is the opportunity for Cotto brand to expand market because of the effect of the AFTA. Each country will reduce the tariff and barrier according to the agreement, so Cotto can penetrate the market more with the lower cost. We will analyse the important market that effect and will be opportunity in the near future.

(1) Lao People's Democratic Republic

There is no local manufacturer in Laos, all ceramic tile is imported from Thailand. So the competition is among Thai manufacturers, the big manufacturers are Sosugo, ThaiTop, Campana, and Cotto. At present, Sosugo gains the largest market in the Laos market and Cotto brand is the second one. Laos people have the low purchasing power, lead the price be the major factor when buying the product. Cotto tile position the brand in the middle to high market, we set the price higher than competitor about 5-10 baht per square meter.

Cotto tile tries to differentiate the products from other producers by setting up the showroom to show the concept and design of the products when using the Cotto tile rather than reducing the price as other competitors do. Because Laos is a developing market, most importers do not want to do the showroom or display because of the increasing cost. We realize that the market will be developed and tile cannot sell piece by piece. We will ask our agents to do the showroom but we will design the layout and offer sample tile for free.

The result is that after the showroom is complete with the nice display as we design, the sale is going up very fast. The end-users can see the big pictures and can imagine the room and pattern when they lay the tile.

For the Laos market, we export through Siam Cement Trading Co., Ltd., so there is slow response to the customer for the order processing. Sosugo can provide products to the customers much faster than we can do. This is another reason that we cannot be the market leader in Laos.

For the AFTA impact, we will use the same concept of “feel the difference” and differentiate ourselves from other brand and set the higher price. We may produce the new design and new technique to the market and offer with the higher price although we will lose some market for the 12”x12” floor tile or 8”x10” wall tile, which is the biggest market in Laos market. Now Laos people accept Cotto tile as the quality product and better than competitors. This AFTA will attract the Vietnam, Malaysia, and other ASEAN countries because of the lower import tax. It is the big advantage that we penetrate in the market before others, so the consumers are more familiar with our brand.

(2) Union of Myanmar

In Myanmar market, it is the tough and high competition because many brands are easily imported from the ocean freight. The Roman Tile from Indonesia, Trai Cera and White Horse from Vietnam are the big manufacturers that compete with Thai manufacturers in the market. Because of Military Council, we cannot find more information for the market share, importing, or other statistic record. All manufacturers from Indonesia, Malaysia, and Vietnam accept as the quality product especially the granito tile. Other big competitor is China, which comes to the market in very cheap price although the quality is low.

We have only one exclusive giant agent in Myanmar, Benhur, the biggest construction material business in the Myanmar. Myanmar will reduce import tax to 0-5% 6 years from now. Anyway there is uncertainty in this market because of military council allow importer to import the product only if they can export and bring the export earning to import the product. Sometimes the importers have to buy import license from other exporter in order to import the product. This condition makes that we cannot export smoothly to Myanmar.

(3) Federation of Malaysia

The Malaysia market is a competitive market because there is the local big manufacturer. The price is very sensitive especially from the China, which is affecting the Cotto sales. We export to Malaysia market about 270,000 square meter in year 2001. The consumption is about 42 million square meter in year 2000 and the total production is about 58 million square meter in Malaysia, the rest is export to other countries. The biggest market is Australia.

The price is sensitive in the market, so we cannot set the high price but its price is in the upper market according to the premium strategy. Because of this nature, product from China that penetrate the market is accepted widely although the quality cannot compete with the local producer or from Cotto.

We firstly penetrated market by offering the one the local market does not have. The difference in size, colour, and design offered us the opportunity to penetrate the market easier. We export through SCT and there is SCMT (SCT in Malaysia) to help us to promote product and provide the

useful information. This is the advantage that we have preparing to the other exporter. Anyway, SCMT create more step to sell to the customer, so the process is slow and cannot respond to the customer effectively.

The import tax is about 30%, which tries to protect the local manufacturer.

(4) Socialist Republic of Vietnam

It is the sleeping tiger, there are 11 factories in Vietnam and the product is in the acceptable quality. The import tax is very high in order to protect the local manufacturers.

Anyway Vietnam manufacturers have the capacity in producing the quality tile to the market with the lower cost. Mostly produced ceramic tiles are consumed in the country, but the capacity for export is very good sign. In the near future, Vietnam is the good opportunity for expanding the market to Vietnam, at the same way we should beware about the Vietnam manufacturer that will penetrate the Thai market also.

(5) Negara Brunei Darussalam

There is no change in the Brunei market much because the normal import tax is 5-0%, but the transportation cost is high. Cotto is the market leader in the market and has one agent for retail sales and private project, and one agent for government project. This market of Cotto tile is the number one and people are aware of the brand, we have developed the showroom and display for a long time. The other manufacturers from ASEAN countries are hard to beat the brand because Cotto tile has been in the market for the long time. The potential competitor is Guo Cera from Malaysia which tries to penetrate the market, and this is the quality one.

We are still working on building the image and brand awareness together with the developing the new product as the leading company in Europe. The import quantity of each month is about 50 containers and Cotto tile is about 50%, the rest is from Italy and Spain.

(6) Republic of the Philippines

TCC has invested in Mariwasa the ceramic tile manufacturer in Philippines. This is the biggest manufacturer in the country, but the production cost is still high and it is not quite efficient.

(7) Kingdom of Cambodia

This is also a developing market, where we also set the price and position in the higher market. There is the big gap between poor and rich people, so the rich one has enough purchasing power to buy our product. Most people still cannot separate between the good and the bad tile, so the price is still factor in decision making For the market, the sub-dealer still shows the tile in the same way as the competitors, so that the consumers still not see the difference between each brand. It is very hard to do it, because every tile from everywhere is imported free of import tax and now in the market is flooded with brands from many countries.

The big competitor is not from ASEAN countries, but from China. China manufacturers sell the granito tile at price 2USD/ SQ.M. while our floor tile is 3USD/ SQ.M. The granito tile, which has the higher quality than normal floor tile, can sell cheaper than our normal floor tile, this is the big factor that attract the consumer to use poor quality granito tile than our quality floor tile.

The marketing strategy is to make the display to show the quality and design at the showroom. The promotion and advertising is also on magazine and radio for the same concept of "Feel the Difference". The higher price and the brand image is the key to set ourselves from others and will be used for the long time.

There is not much effect for this country, because there is no local manufacturer, and there is no policy of trade barrier or import tax. Now the import tax is 0%, so after AFTA the policy will still be the same.

(8) Republic of Indonesia

There is the local manufacturer and the famous one is Roman Tile. Roman Tile can be produced in the low cost, because they do not need to import the raw material. In Thailand, we still need some material imported from other countries, which include Indonesia, which makes the cost still high.

4.4 Competitive and SWOT Analysis

4.4.1 Competitive Analysis

According to ceramic industry has many producers in the market and start joint venture among producers such as TCC has taken over Sosugo Ceramic Co., Ltd. and hold stock more than 50%, Thai Top industry Co., Ltd has joint venture with Dynasty Ceramic Co.,Ltd and become the group of Dynasty Ceramic Co., Ltd. This joint venture is to increase strength and reduce the weakness of each company to be a group of companies to compete with others. It is very hard to stay alone without connection with other, the economic slow down makes situation not good to invest for the new factory or expand the capacity. So Merger & Acquisition is the best choice the manufacturers choose to implement.

There are 2 types of competitive strategies.

- (1) Price Competition
- (2) Quality Competition

During the past 3-4 years including the crisis period of real property, most manufacturers focused on price-cutting to attract their customers from competitors. Therefore, the manufacturers have to control their production cost to survive in the competitive market. However, at present the ceramic market outlook is better especially in home maintenance sector. Customers in this sector usually look for high quality product even though slightly higher price. Therefore, some manufacturers have turned to focus on the higher quality product to serve this market and avoid competing in price.

Some companies focused on the low cost, which try to reduce the production cost. This market is focused on the low production cost. They will concentrate in the low price product which is easy to manufacturer and not much application. This is a large market that uses the price as a factor to penetrate the market.

We will analyse only the major competitors in the industry

Domestic Manufacturers

- (1) **ThaiTop Industry Co., Ltd. and Dynasty Ceramic Co., Ltd.**

The main business of Dynasty Ceramic Co., Ltd produces and distribute floor and wall tile under brand “Dynasty” and “Thaitop”. It has been established since October 17, 1995.

Strength

- (a) It is family business that makes management fast and smooth.
- (b) Have the factory outlet, which can respond to the market faster than other competitors because they reduce when sell through agents.

Weakness

The product is not enough to satisfy the customers because of the limited capacity.

(2) **Royal Ceramic Industry Co., Ltd. (RCI)**

RCI is the producer and distributor of glazed ceramic wall tile and floor tile. The product is classified as the interior decorative material under brand “ROYAL”, which has both normal design and special design. RCI is also famous in GRANITO tiles that have design both polish and unpolished.

Strength

- (a) Established more than 30 years and concentrate on product specialist as wall tile and porcelain tile.
- (b) Have competent people and team marketing.
- (c) Management team is strong and has the good vision
- (d) The product is accepted in quality, design, and variety of product in the same category.

Weakness

- (a) The price is high and consumers do not have purchasing power to buy the products.
- (b) The production cost is high
- (c) Cannot provide full range of products to the consumers.

(3) **Thai-German Ceramic Industry Co., Ltd. (TGCI)**

Producer of ceramic tile under brand “CAMPANA”

Strength

- (a) The first manufacturer in Thailand
- (b) Brand image is in customer’s mind

Weakness

- (a) Production cost is high
- (b) Do not concentrate on marketing activities and market situation

(4) Mosaic Union Co., Ltd.

Produce and distribute product of

- (a) Mosaic tile UMI, smaller than 4"x4" on the net
- (b) Floor tile, Duragrez
- (c) Wall tile, LILA
- (d) Granito tile, Duragrez

Strength

- (a) One of two companies that produce mosaic tile to the market, another one is TCC.

Weakness

- (a) There is a dispute in the court about NPL and current performance is loss

International Manufacturer (ASEAN)

(1) Roman Tile (Indonesia)

This is the big manufacturer in Indonesia and famous in the granito tile. The good quality and the cheaper price make it come to Thai market easily. Mostly we import from this company.

Strength

- (a) Good Quality and famous in homogeneous tile
- (b) The lower cost of production
- (c) Famous in the world market
- (d) Good brand image

Weakness

- (a) Do not have full range of product, emphasize on homogeneous tile

(2) Asia Tile (Indonesia)

Strength

- (a) Good design in Wall and Floor tile
- (b) Cheaper price

Weakness

- (a) The quality is not good
- (b) Commodity product

(3) Muria (Indonesia)

Strength

- (a) High capacity about 50 million square meter annually
- (b) Acceptable quality
- (c) Famous in Floor and Wall tile

Weakness

- (a) The design does not match the market

(4) White Horse (Malaysia)

Strength

- (a) Good quality in homogeneous tile
- (b) Lower cost of production

Weakness

- (a) Design of wall tile is not good

(5) MML (Malaysia)

Strength

- (a) Good quality of homogeneous tile

(b) Full range of homogeneous body

(c) Focus on high end market

Weakness

(a) High price product

(6) Gua Cera Ceramic (Malaysia)

Strength

(a) Floor and wall tile bigger size is popular

Weakness

(a) Brand image is not good

(7) Mariwasa (Philippines)

This is the big manufacturer in Philippines. The cost of production is not lower than in Thailand. It is 40% higher and production is not efficiency.

(8) Tile-Cera (Vietnam)

The big manufacturer in Vietnam which has the good quality. The lower cost of production and over-capacity of 1 million square meters is big competitor in this area.

4.4.2 SWOT Analysis

Strength

- (1) Have ability and resources to produce variety of product and develop the new product that differ from other competitors.
- (2) Maximum Capacity
- (3) Maximum Market share
- (4) TCC is in Siam Cement group, so it is easy to find source of money or funding
- (5) Have more than 600 agents to distribute the products

- (6) Strong in Brand Image, so the product can be sold in the good price
- (7) Have more resources to invest in promotion and materials than other competitors.
- (8) TCC is one-stop-shopping company that produces the full range of products of ceramic tile: Floor tile, Wall tile, Granito tile, Mosaic tile, and Gres-Porcelain tile.
- (9) TCC is the manufacturer that has advanced technology and qualified human resources.

Weakness

- (1) The technologies, designs and machines still bought from the foreign countries.
- (2) The competition among agent
- (3) Production is still not smooth and the delivery date is not accurate.
- (4) For the export market, the brand image and country of origin is still low compared to Italy and Spain and not outstanding compared to the ASEAN manufacturers.
- (5) The product does not perfectly match with the customers' needs in some countries such as Australia.
- (6) The delivery period and service is lower than competitors.
- (7) Slow response to the market
- (8) Have to import some materials from other countries

Opportunities

- (1) For the environment awareness, people use other materials more including ceramic instead of wood.

- (2) Consumption rate of tile of person per year in Thailand and is still low compared to the developed countries. There is much opportunity to growth in the future.
- (3) The increase in the number of accommodations, higher education, so people have more knowledge to choose the material which is most valuable.
- (4) AFTA implementation makes the import taxes of ASEAN countries lower. The export market will be expanded and demand increase.
- (5) The reduced tax of the raw material means that the cost of production is lower.

Threat

- (1) A lot of manufacturers produce commodity product and make the supply more than demand.
- (2) AFTA implementation will make the imported tile cheaper.

4.4.3 Competitive Benchmarking

Table 4.20. Competitive Benchmarking.

Company	Price	Quality	Customer Service	Premium Branding
TCC	***	****	****	****
TGCI	*****	**	**	**
UMI	***	***	**	****
RCI	***	***	**	****
TILETOP/DINASTY	***	**	**	**
SOSUGO	****	****	**	****
OTHER				

Remark : 5=Excellent 4=Very Good 3=Good 2=fair 1=Poor

Source : Marketing Information, Marketing Department, Thai Ceramic Company Limited

From table competitive analysis, TCC are rated in the very good level in every attribute except the price factor, which falls in the level 3, which as higher price than the TGCI and SOSUGO because TCC uses the premium price as the strategy. In the acceptance of the brand as a premium brand and customer service are very good rating for TCC, so the company uses this as a competitive advantages to compete with other competitors.



V. CONCLUSIONS, RECOMMENDATIONS, AND FUTURE PLAN

5.1 Conclusions

It is the growth stage of the ceramic tile business. Many advance technologies have been adopted to make the tile stronger and more beautiful. The new techniques make tile look more natural like the stone, wood or the marble. The overall economy is better and start to recover again, the construction business and concerned industry is growing including ceramic tile business.

In the past, the price is the factor that people will consider to buy the product. Now from the research show that quality is the first factor, it means that if the higher price compensates the better quality, the consumers are willing to absorb it. So this makes the Cotto tile concentrate on producing the quality ceramic tile to the market and develop the new product to serve and satisfy the market all the time, until now Cotto tile is the number one in the consumer's mind in both brand awareness and brand image.

Because the supply is over demand, ceramic tile industry has the very tight competition and each manufacturer fights to survive in the market. Cotto, UMI, RCI, Campana, Sosugo, etc try to apply many marketing strategies to gain the market share and adopt themselves according to the rapid changing situation. Only the domestic capacity, the supply is much more than local demand.

In the near future, AFTA agreement has included the ceramic tile in the fast track list, which has to reduce import tax to 0-5% from the members in year 2003 as in the graph below.

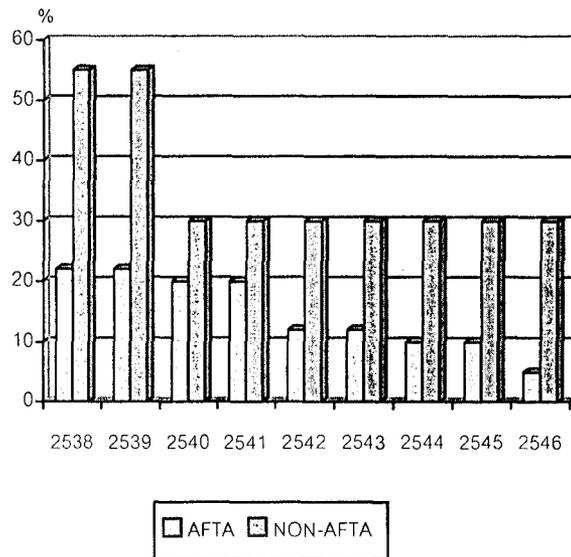


Figure 5.1. Import Tax of AFTA and Non-AFTA Countries.

This will stimulate the imported tile from the ASEAN countries to Thailand with the cheaper cost and make the market much more competitive. Only domestic manufacturers, each does not gain the competitive advantage so the cost is not much different. Especially Indonesia, Malaysia, and Vietnam manufacturers that the production cost from the materials are cheaper than in Thailand. So the cheap price with the moderate to high quality product can come to penetrate the market in Thailand, especially the homogeneous tile. The Roman Tile, White Horse, etc is the famous manufacturers that can penetrate and share the market from Cotto and other local manufacturers. Now Roman Tile assigns Boonthavorn as the exclusive agent in Thailand. Boonthavorn is also Cotto's big agent in Thailand and most people will go to Boonthavorn to buy the ceramic tile. Now the Cotto's display is reduced by imported tile.

Next year, the import tax will reduce to 5%. We are sure that there are many brands in the market for the consumers to choose. There is the trend that other producers will reduce the price to attract the consumers and compete with the imported tile.

For the Cotto tile, we emphasize the medium to high market, the marketing strategies will stress on building the brand image and brand awareness for the quality. We will provide the difference in design, colour, trend, or even the feeling to be the market leader for the high quality product. We have invested in the technologies to develop the product and the market as the world leader ceramic tile in the world. We have set the higher price than competitors as perceived better product and quality. We will emphasize more on display, the product variety, and provide the difference to the market in order to be the leader in the world.

From the questionnaire, we found that people emphasized on the quality first, if we can commit the higher quality, people prefer it. In the consumers' mind, now Cotto is the first brand in mind and can get the acceptance not only in the country, but also the international market.

5.2 Recommendations

TCC gains the advantages than other competitors now because Cotto is accepted in the market and also international market as the quality product and has applied the marketing strategies in the right way for a long time and it succeeds both markets share and the price.

We have to consider 5 factors.

(1) Distribution Channel

The important part of ceramic business is large network of agent and dealers. Normally, the customers need to see the product before making

decision. So, the manufacturers have to have enough agents with close relationship with customers.

(2) Low Cost Manufacturing

Due to the price competitive nature, the manufacturers have to be able to produce high quality product at lowest cost. If the cost is still high, we cannot compete with other competitors such as Indonesia, Malaysia, especially China where the cost is much cheaper 50% preparing with our cost.

(3) Design of Product

The product must be colorful and have distinct design to attract customers. Most customer behavior will select the products by color and design first and then consider the price later. So, manufacturers have to do customer research frequently to find out their preference of color and design in order to produce the product that serve their needs.

(4) Brand Image

Avoiding the price competition, Cotto concentrate on building the brand image. Cotto advertisement is on the building image and brand recognition, not selling the low price product. We are sure that it is the good way that we can compete in the market. We cannot reduce the price to compete with lower cost imported tile. We have to stress on brand awareness and brand image to put ourselves different from others.

(5) Time to Market

Ceramic tile is the product that is easy to duplicate the design, pattern or color. There is no legal or the official patent or right to protect the design. Competitors easily copy the good sales design to produce and launch in the

market in the very short time. So the time to market is important factor to success, the trend, and fashion is changing all the time and very quickly, if competitors launch to the market first, we will lose the advantages. The second to the market is not quite success and be viewed as the copier, not the pioneer or the market leader. So the leader has to introduce the new product all the time to set us different from the followers. Cotto has to be the market leader and also the leader of the trend and fashion.

TCC has to adjust the marketing mix in order to survive in the competitive market and can fight with the domestic manufacturers and also the imported tile. For the 4ps, TCC has to apply marketing strategies as following and invest in differentiation.

(1) Product

Create differentiated new product in order to build value added to the products and to be able to set the higher price. (Innovate Products to Drive Differentiation and Margins)

Develop big size floor tile and wall tile to penetrate in the new market.

Increase the sales of high end product such as rustic, marble, mosaic and the new gres porcelain.

Try to reduce cost of production or increase efficiency.

(2) Price

Since price-decreasing strategy makes a lot of problems for the business and could be the cause of marketing problem in the future, the company tries to avoid the price competition.

Premium Pricing

- (a) Floor tiles: the price is 130-150 baht per Sqm, over competitors 5- 10 baht

- (b) Wall tiles: the price is 150-170 baht per Sqm, over competitors 10-20 baht.
- (c) Giving discount later
- (d) Cumulated sale volume program

Because there are many targets since the low to high market, TCC has to scarifice some production line for the commodity product to produce the high end product to gain more margins rather than more market share.

(3) Place

Develop the expertise of distributor (Reinvent Distribution or service channel)

	2001	2003
(a) Develop on product display (60 shops as target)	35	50
(b) Revise Display (shops)	20	30
(c) Provide the acknowledge of ceramic to the potential distributors		
(d) Try to find the efficiency agent and reduce the non-efficient one		
(e) May be find the other channel to distribute the product such as establish outlets by itself		
(f) Encourage selling to the big project to distribute more products and increase market share		
(g) May set the Cotto gallery or showroom to show the products of Cotto tile. This will build the image of Cotto tile when the gallery may have the consultant that can help consumers to make the decision or suggest the customers.		

(4) Promotion

Advertising

This is the important part that we concentrate because we focus on this strategy to create the brand image and set the position in the high-end market. So we have many activities to promote and support the brand to reach that target.

Continuously Launch Advertising in order to create Brand Recall and Brand Image to the end users. Now concept "Feel the Difference" is used to create the differentiation in the market. Lots of money invested in the advertising in this campaign. TCC tries to separate its product from the competitor to be a unique in design and quality in order to set the premium price as well as maintain the position of the leader in the competitive market.

This advertising is on the television commercial, billboard, and magazine, which express the brand image and the different design that the consumer can meet with the COTTO tiles. These pictures show that people feel amazed when seeing the COTTO tiles, and this can make them feel in the different way from the traditional when thinking about COTTO tiles.

This ad also uses in the international market also. We distribute the flag, Japan flag to the agents to promote the brand image and the concept is in the same direction as the domestic market, so we can control it successfully.

Display

We concentrate on building the image and the design, so we plan to increase the display at the agent shop to show the tile in the new and beautiful looks. We try to show the consumers how to use the COTTO tiles

otherwise the consumers will not see the big picture why the COTTO tile is better than competitors.

The company usually provides the free sample tiles for the new design for renovation to encourage the agent owner to change and update the new design. The agents have to pay the construction cost by themselves or the company will help to support, just case by case.

The company has many instant display stands to the agent according to the space and the tile to show. The company will provide to the customer according to their needs.

For dealers, we provide fixed layouts for displaying the ceramic tiles in various spaces and styles in order to save time as well as easy to install and maintenance. These layouts can show various types and styles – wall tile, floor tiles, etc. Customers feel convenient while they are walking through the shop. Layouts are easy to be renovated and change to new style. Another way around, layout style depends on space available, much more space will have fixed layout different from the less space.*

Selling

The company uses the rebate to stimulate the sales in the domestic market. Each customer will have rebate at different quantity according to the performance.

For international market, we use only discount in case by case because mostly the company focus on the premium price and support the other promotion materials such as advertising, display, or the banner.

Integrated Marketing Communication

Cotto apply the integrated marketing communication to deliver the brand image, brand awareness and the quality of the product to the consumer's mind. We have to use many medias to communicate the better quality, better image to end-users and build the feeling of the Cotto brand. We have to do this way in order to avoid the price competition. TV, magazine, radio, billboard, etc is the good channel that we use together. Although Cotto is the first brand in consumers' mind now, we have to continue communicating the difference to the consumers all the time.

5.3 Future Research

For the future plan, TCC has to survey the market and respond to the imported tile. The brand image and brand awareness of Cotto tile after the lower price product, moderate quality comes to the market. This survey should survey the consumer's behavior in other province in Thailand also or may be throughout Thailand. Each province or area has different buying behavior and buying factors may be different, so if we can survey all markets, we can set the specific marketing strategy suit to each area effectively.



APPENDIX A
QUESTIONNAIRE

Questionnaire

The project studying factors, behavior and attitude toward Cotto ceramic tiles as market data as well as product and service development in order to meet customer needs

Objectives

1. To study factors in tile selection of consumers in Bangkok
2. To study consumer behavior in purchasing ceramic tiles
3. To study the attitude of consumers toward Cotto ceramic tiles

1. Do you recognize ceramic tiles?

Yes

No

2. Do you apply ceramic tiles in your house?

Yes

No (go to no. 4)

3. Which area do you apply ceramic tiles in your house? (more than one answer)

..... Bathroom

.....Kitchen

.....Living room

..... Bedroom

.....Recreation room

.....Garage

..... Terrace

.....Other

4. Why do you not apply ceramic tiles? (more than one answer)

Higher price

Unpleasant design

Unsuitable applications

Difficult installation

Less beautiful appearance

() Difficult maintenance

() Other

5. What do you think as the main factors in purchasing ceramic tiles? (ranking : 1 = most important)

..... Price

..... Quality (strength & durability)

..... Brand

..... Easy installation

..... Design and appearance

..... Suitable applications

..... Modernity and uniqueness

..... Other

6. Who has influences on your decision when you purchase ceramic tiles? (more than one answer)

..... Own judgement

..... Family member

..... Friend

..... Architect

..... Seller

..... Contractor

..... Other

7. Why do you apply ceramic tiles instead of other materials (ranking : 1 = most important)

..... Easy cleaning

..... Cheaper price

..... Easy installation

..... Good appearance

..... Variety

..... Other

8. Of ceramic tiles which brand do you think of or recognize?

1.....

2.....

3.....

4.....

9. What is your attitude toward these following brands of ceramic tiles?

(5 = very good, 4 = good, 3 = moderate, 2 = bad and 1 = very bad)

	COTTO	SOSUCO	CAMPANA	UMI
Appearance	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Price	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Durability	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Modernity	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Application	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1
Notability	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1	5 4 3 2 1

10. What is your perception of Cotto ceramic tiles? (ascending ranking from the first order)

- Beautiful design
- Modernity and creativity
- Quality
- Variety
- Reasonable price
- Market leader
- Other

11. How do you recognize Cotto ceramic tiles? (more than one answer)

- TV ads
- Radio
- Newspaper
- Bill board
- Product using *
- Magazine
- Other



12. Do you recognize Cotto natural-look ceramic tiles (Rustic series and Marble series)?

- () Yes () No go to no.14

13. How do you recognize the natural-look ceramic tiles?

- () Exhibitions
- () Printing materials (newspaper and magazines)

- () TV and Radio
- () Shop display
- () Other

14. How do you perceive natural-look ceramic tiles?

- Most preference
- Preference
- Same as other tiles
- Not preference
- Most not preference

15. Where do you purchase ceramic tiles?

- Cementhai Home Mart
- Home Pro
- Home work
- Boon Thaworn store chain
- Tile stores near your resident
- Tile stores on Ratchada Road
- Other

16. If you want to purchase ceramic tiles, do you purchase Cotto natural-look ceramic tiles?

- () Yes
- () No because.....

BIBLIOGRAPHY

1. Asian Ceramics and Glass Magazine, November 2001.
2. Asian Ceramics and Glass Magazine, March 2002.
3. Report and Planning Department Ceramic Cementhai Co., Ltd.
4. Marketing Department, Thai Ceramic Co., Ltd.
5. Tiles Today Magazine #27, Australia, April 2002.
6. Tiles Today Magazine #29, Australia, October 2002.
7. Thailand Development Research Institute, Bangkok, May 2000.



