

慶應義塾大学学術情報リポジトリ

Keio Associated Repository of Academic resources

Title	A study on promotion quality function deployment in strategic marketing planning
Sub Title	
Author	黄, 柏鈞(Huang, Po-chun) 当麻, 哲哉(Toma, Tetsuya)
Publisher	慶應義塾大学大学院システムデザイン・マネジメント研究科
Publication year	2009
Jtitle	
Abstract	
Notes	
Genre	Thesis or Dissertation
URL	http://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO40002001-00002009-0036

修士論文

2009 年度

A Study on Promotion Quality Function
Deployment in Strategic Marketing
Planning

黄 柏鈞

Huang, Po-chun

(学籍番号:80833442)

指導教員 准教授 当麻 哲哉

2010 年 3 月

慶應義塾大学大学院システムデザイン・マネジメント研究科

システムデザイン・マネジメント専攻

SUMMARY OF MASTER'S DISSERTATION

Student Identification Number	80833442	Name	Huang Po-chun
Title A Study on Promotion Quality Function Deployment in Strategic Marketing Planning			
Abstract <p>The Strategic Promotion QFD (Quality Function Deployment), presented in this article, is an innovative modification of the concept of Quality Function Deployment (QFD). It is a discussion tool that serves for the purpose of enhancing the marketing communication in both of the external and internal aspects; in the other word, to improve the marketing management and provide a positive contribution to the overall company performance. Development of the emerging communication technologies and the influence of globalization have rapidly advanced during the last decade; through these progressions, the nature of the business have been altered, and consequently, intensify the level of competition. In order to cope with the contemporary market circumstances and intensive competition, the effective of marketing management should be stressed in this matter. In order to enhance the effectiveness of marketing management, in this research, the method of Quality Function Deployment (QFD) is implemented in the promotion planning since the QFD method offers rational analysis process, and provides clear indications in prioritizing the levels of significance for each element. By doing so, the Strategic Promotion Quality Function Deployment (PQFD) was conducted to serve the marketing management in terms of improve the effectiveness of promotion and resource planning perspectives. In this research, to investigate the effects of PQFD upon marketing management performance would be the main purpose.</p> <p>Key Words: <i>Promotion Planning, QFD, Resource management, PQFD</i></p>			

Table of Content:

1. Introduction:

1.1 Background and Objective of the Research 6

2. Prior Research 7

2.1 Quality Function Deployment (QFD) 8

2.1.1 Kano's model 11

2.2 The Concept of Strategic Marketing Management 13

2.2.1 External Marketing orientation 13

2.2.2 Internal Marketing orientation 14

2.2.3 Interactive marketing orientation 14

2.3 Issues 15

3. Prior Marketing and QFD Integration: 20

3.1 Marketing relationship 23

3.1.1 Value Marketing 23

3.1.2 Volunteer Marketing 23

3.1.3 Total Marketing 24

3.1.4 Environmentally Conscious Marketing 24

3.2 Analytical Hierarchy Process (AHP) 24

3.3 Benchmarking 25

3.4 Linking customer requirements and marketing policies 26

3.5 The setbacks 28

4. The Proposal of Strategic Promotion Quality Function Deployment (PQFD) 31

4.1 The overview of Strategic Promotion Quality Function Deployment 36

4.2 The structure of PQFD 38

4.2.1 Customer requirement	41
4.2.2 Marketing matrix	41
4.2.3 Importance to Customer and Unique Sales Point	44
4.2.3.2 The calculation of “Message Score”	45
4.2.3.2 The Promotion Score	47
4.2.4 Message score and Activity Score:	47
4.2.5 Message Benchmark & Activity Benchmark	49
4.2.6 Transfer PQFD score into Promotion Plan:	49
5. Verification of PQFD	51
5.1 Apple iPhone case study:	51
5.1.1 Industry Background:	51
5.1.2. Product Information	51
5.1.3. J.D. Power research	52
5.1.4 PQFD:	53
5.1.5 Promotion Planning:	53
5.1.6 Apple’s Promotion Strategy:	54
5.1.7 Assessment:	55
5.2 Sony Bravia HDTV:	57
5.2.1 Industry Background:	57
5.2.2 Product Information:	57
5.2.3 J.D. Power Study:	58
5.2.4 PQFD:	59
5.2.5 Promotion Plan:	59
5.2.6 Assessment:	59
5.3 Genesis Social Welfare Foundation	62

5.3.1	<i>Industry Background:</i>	62
5.3.2	<i>Event Information</i>	63
5.3.3	<i>Genesis feedback</i>	64
5.3.4	<i>PQFD</i>	65
5.3.5	<i>Promotion Plan</i>	65
5.3.6	<i>Assessment</i>	66
5.3.7	<i>Implementation:</i>	67
6.	<i>Validation of PQFD</i>	70
6.1	<i>Interview</i>	70
6.1.1	<i>Interview data analysis</i>	71
7.	<i>Conclusion:</i>	73

1. Introduction:

1.1 Background and Objective of This Research

Development of the emerging communication technologies and the influence of globalization have rapidly advanced during the last decade; through these progressions, the nature of the business have been altered, and consequently, intensify the level of competition. Moreover, as the new communication technologies, such as internet, and cellular phone, it allow large amount of information transitions; it enables consumer obtain more information. Consequently, the customers became further selective since they have access to more information. Thus, the nature of competition has altered dramatically. Therefore, in order to cope with the contemporary market circumstances and intensive competition, the effective of marketing management should be stressed in this matter. According to Kotler, the marketing management is “the process that can allow an organization to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage.” As stated, the marketing decision making process could significantly affect the effectiveness of marketing management. Therefore, in order to improve the overall effectiveness of marketing management and cope with the intense market environment, it is necessary for the marketing department to enhance the efficiency of decision making process for promotion planning and the resource management aspects. However, instead of providing logical thinking process and offering concentration on the promotion planning and resource management, the current marketing decision tools tend to focus on the general perspectives. Thus, a new approach for assisting the promotion and resource planning would be needed in this matter. The objective in this research is to investigate a method for the purpose of providing positive reinforcement to the marketing

management in terms of upgrading the effectiveness of decision making process of promotion planning and resource management.

2. Prior Research

In order to assess the current marketing management, it is necessary to understand the planning tools that used by different fields and the contemporary management tools. The product development tools would be highlighted in the following paragraph. The traditional marketing decision making tools, such as the SWOT analysis, 3Cs analysis, could offer well-rounded assist for the marketing management in terms of organizing the general information, it is noticeable that these models have the characteristic of easy to use, timeliness, and could be implemented in the group discussion. However, when investigating the marketing decision making stage, these models have limited impact toward the promotion planning and resource management perspectives. On the other hand, the software-based marketing decision making simulations, such as the Marketing Decision Support System (MDSS) enables the marketing department to conduct the marketing decision according to the market information. However, the MDSS could be time consuming in terms of operation and preparation, this could decline the company's responsiveness to the competition; moreover, since the thinking process is done by the computer, the marketing department might suffer from the risk of miss interpretation for the marketing personnel; moreover, it is difficult for the marketing department to have the consensus over the object decision. For this reason, the concept of Quality Function Deployment (QFD) is implemented, since it could offer the functionalities of providing systematic process in planning; moreover, prioritizes the importance to focus. Therefore, by integrating the Quality Function Deployment (QFD) mechanism with promotion mix

factors, the Strategic Promotion Quality Function Deployment (PQFD), as a discussion tool, was developed; it could improve the marketing management in terms of enhancing the effectiveness of marketing operations. PQFD simplifies the promotional operation by evaluating the importance of promotion messages and activities. While the original QFD method aim to break down the complexity of manufacturing design and to simplify the planning process, the PQFD method focus on using the logical thinking process as discussion

While the method of Strategic Experiential Module (SEM) focuses on amplifying the sustainable competitive advantage through ensuring the customer experiences; PQFD focuses on organizing the promotion activities and enhancing the resources being allocated into the proper elements so that the product/service provided by the company could satisfy the intended customers with the limited operational resources. This research could offer positive support for marketing management in upgrading the effectiveness of promotion planning and resource management; consequently, hope to assist the companies to have competitive advantage over the competition.

2.1 The Concept of Quality Function Deployment (QFD)

“QFD (Quality Function Deployment) is a method for structured product planning and development that enables a development team to specify clearly the customer’s wants and needs, and then to evaluate each proposed product or service capability systematically in terms of its impact on meeting those needs.” (Cohen, 1995) QFD is a customer oriented approach to product development. QFD serve with the purpose of capturing customer’s desires, investigate the customer requirements into the

engineering design objectives; in addition, it supports design teams in developing new products in a structured way based on an assessment of customer's needs. (Matzler, 1998) QFD was first developed by the Mitsubishi Heavy Industries in 1971; during the 1980s, Toyota and its suppliers then developed it in numerous ways. Massachusetts Institutes of Technology's professor Don Clausing introduced this method to America; Quality Function Deployment soon became popular and being used worldwide. (Ishii & Hanno) Clausing address that the Quality Function Deployment has been used successfully by Japanese manufacturers of consumer electronics, home appliances, clothing, integrated circuits, synthetic rubber, construction equipment, and agricultural engines. The following figure compares the number of design changes between Japanese auto makers with quality function deployment and US auto makers without QFD. We can clearly see by using QFD, initial design could have better accuracy, and the necessity of change can be identified early.

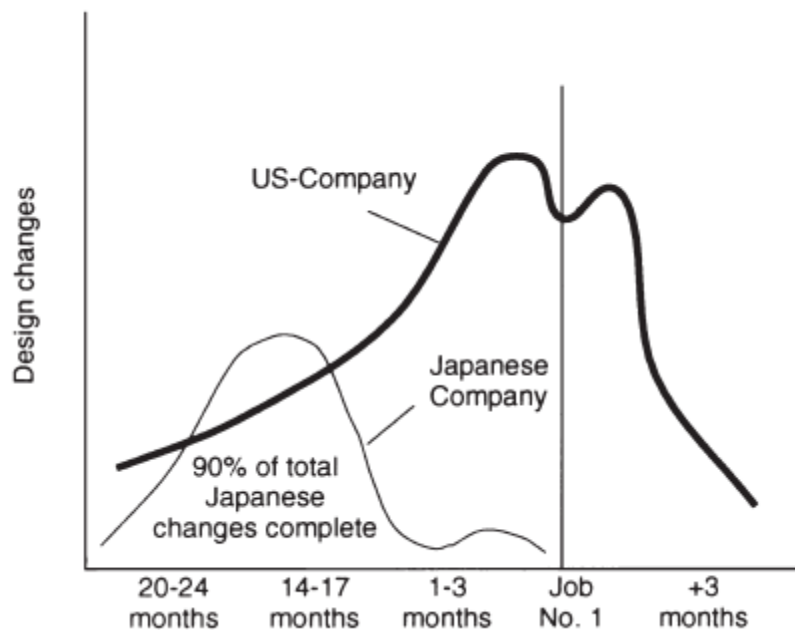


Figure 1. Japanese auto maker with QFD versus US auto maker without QFD (Sullivan, 1986)

According to Clausing, the strategic quality management means more than avoiding repairs for consumers. It means that companies learn from customer experience and reconcile what they want with what engineers can reasonably build. Before the industrial revolution, different field of business operations are often control by same individual; from marketing, finance to design, research and development is performed by the same person. Yet, after the industrial revolution, due to high amount of production and complicated manufacturing process, the focus of each business operations separate in a greater degree, the all done by one operation is no longer efficient for the mass production. The business departments need to be specialized and concentrated, in order to achieve their dissimilar objectives in a timely manner, and eventually the corporation as one entity could be prized with better proficient.

Clausing explain the intention of Quality Function Deployment: “the managerial function is often remains disconnected; producing a costly and demoralized environment in which product quality and the quality of the production process itself suffers. Top executives are learning that the use of inter-functional teams benefits design. But if top management could get marketing, design, and manufacturing executives to sit down together, what should these people talk about? This is where the house of quality comes in.”

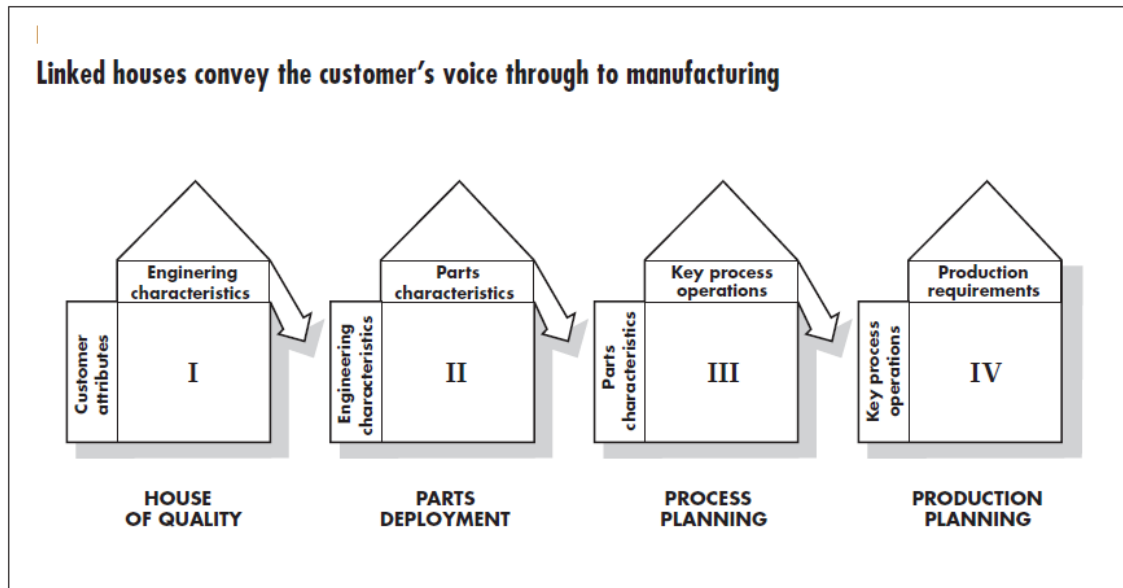


Figure 2. Process of Quality Function Deployment (QFD)

As in conducting a QFD practice, there are four primary stages in deploy the customer requirements into the final stage in the production planning. From transforming the customer requirements into the engineering characteristics in the first, House of quality; then, the engineering characteristics can be shifted into the components level of distinctiveness. Moreover, by giving the fact of parts characteristic, the process planning perspectives could be identified through transforming in the process planning stage; last, the production process can be determined through the process characteristic. With these sets of transformation, the customer requirements, from intuitive research information, QFD allows the information to integrate the engineering formality,.

2.1.1 Kano's model

Matzler (1998) stress that there are two major lesions that Kano's model teaches us: "First. All customer satisfaction attributes are not equal. Not only are some

more important to the customer than others. But some are important to the customer in different ways than others. For example, dissatisfiers matter not at all when they are met, but seriously detract from overall satisfaction when they are not met; in contrast, satisfiers contribute to overall satisfaction linearly.” “Second, the old product quality strategy of responding to customer complaints can now be seen to be inadequate. Customer complaints are for the most part linked to dissatisfiers. A quality strategy based solely on removing dissatisfiers can never result in satisfied customers.

2.2 The Concept of Strategic Marketing Management:

Marketing mix strategy defined as “the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives.” (Marketing News, 1985) Marketing mix is one of the most often used strategic planning tools in the field of marketing. Kotler (1991) presented a model of three types of marketing strategy orientation could contribute to the effectiveness of marketing management:

2.2.1 External Marketing orientation

The focus of this orientation is to improve marketing relationship between the company and its customers through adopting and utilizing effective marketing strategies. External marketing is the fundamental function for marketing, it design the marketing mix strategies and evaluate the marketing decisions that communicate with the intended customers. In short, external marketing orientation is the management process that can allow “an organization to concentrate its limited resources on the greatest opportunities to increase sales and achieve a sustainable competitive advantage.” (Kotler, 1991) this

message suggests the importance of resource management since the resources are often limited; thus, it is also necessary for the marketing management to seek for effective resource planning in order to achieve better return on investment.

2.2.2 Internal Marketing orientation

In this orientation, to improve the internal team management is the primary objective; Kotler believes that within the organization, there are many non-marketing factors that could also affect the success of marketing operation; therefore, it is important for the marketing management to be aware of the interdepartmental coordination. Moreover, system marketing, which is a current practice within the broader context of internal marketing, involves the interaction between the company's management and employee, and its customers. Here emphasis is placed on pre-selling, selling, and post-selling activities in the business practice. (Caruso, 1992) thus, internal marketing is the management perspective in achieving mutual-respects among the marketing and non-marketing personnel, so that the company could offer consistent and well-executed set of marketing activities to the intended customers.

2.2.3 Interactive marketing orientation

John Deighton at Harvard, describes the interactive marketing is the ability to address the customer, remember what the customer says and address the customer again in a way that illustrates that we remember what the customer has told us (Deighton 1996). In order to achieve this orientation, it is important for the company to have effective recording tools and database management that collect and maintain the customer profiles and marketing operations conducted during the past. This orientation

also has direct impact towards the success of marketing management since “the more information a company has about its customers, the better it interacts with them and, therefore, the better their needs are satisfied.”(Madu and Kuei, et. 1994)

The company should pay attention to these marketing orientations due to these orientations could bring great deal of influence upon the effectiveness of the marketing management. Hence, PQFD method takes the concept of Kotler’s marketing strategy orientations into account, and applies it as the objectives when evaluating the levels of improvement in marketing management.

2.3 Issues

The market competitive trend requires both the manufacturing design team and the marketing design team to offer fast response and effective communication to cope with the ever changing market. Moreover, due to the globalization, it results in raising the competition; the customers are looking for product that could offer multi-functions and various customizations. Thus, the diverse design team that consists different specialists, integrate group of people that have different expertise, become crucial in the company’s product development stage. By integrate different specialists into a design team; we have a better chance to interpret what customer wants, since the foundation of judgments are based on different philosophies. Yet, on the flip side of coin, with different foundation of judgments, it makes the communication an essential factor for the success of the project. Communication in this case, can be defined in three main categories:

First, the internal team communication:

- The functional team

Second, the external team communication

- Retailer, agency, supplier

Third, the corporation team communication

- Other departments and section within the organization

Kummar and Sudarshan (1988) also stated this concern by saying “Current market expectations and competitive trends demand faster and more effective communication of intelligence among manufacturers, distributors, retailers and customers. To satisfy these new challenges, it is necessary to have sound marketing and manufacturing strategies defined under the same goals and objectives.” (1988) Hill (1989) also has emphasized the importance of consistency between manufacturing strategy and the overall business unit strategy as well as the importance of consistency between manufacturing strategy and marketing strategy within the business. He notes that manufacturing managers must understand and appreciate “order winners” and that manufacturing decisions should be driven by the relevant order winning criteria for the markets being served.

Hayes and Whellwright (1984) also support the importance of the manufacturing and marketing “interface” in describing the relationship between the manufacturing process choice and the product life cycle. In their product-process matrix, the advocate that firm consciously relate manufacturing process choice to the product life cycle. Likewise, for many years, Skinner (1974, 1986) he advocated that manufacturing decisions should be driven by marketing factors; otherwise, manufacturing policies and procedures may

work against the marketing plan. Also Pearce and Robinson (1992) support the idea by saying: “most basic business policy textbook describe in some detail the necessary synergistic relationships among the functional units of the firm, particularly between manufacturing and marketing.” Thompson (1967) has referred to this relationship in which the performance of one group is dependent on the performance of the other group as “reciprocal interdependency.” In another words, the output of one functional team might have a great deal of effect upon the different functional team for the success of the company. In fact, Thompson suggests “the presence of reciprocal interdependency between marketing and manufacturing presents the most troublesome, demanding and complex coordination problems for a manufacturing company.” Thus, “a distinguishing feature of this type of reciprocity is that each unit presents a contingency for the other, and each unit must constantly make mutual organizational adjustments based on the actions of the other unit; hence close coordination between manufacturing and marketing is a prerequisite to high firm performance.” (Deane, McDougall, Gargeya, 1992)

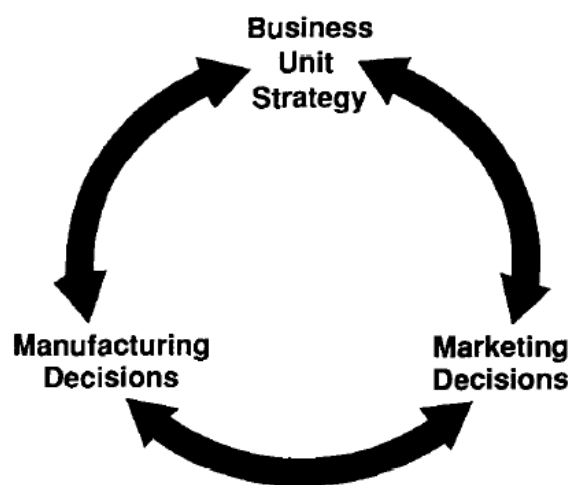


Figure 3. The Model of Manufacturing and Marketing Integration

(Deane, McDougall, Gargeya, 1992)

Yet, due to historical development and disciplinary boundaries: research on product development in marketing long has differed from that in engineering design in terms of product representation and choice of performance and success metric (Michalek, Feinberg, Papalambros, 2005) For example, in marketing a product often is modeled as a “bundle of attributes” (McAlister. 1982) over which consumers have preferences represented by utilities, so that firms can manipulate the former to maximize the latter.

In engineering design, by contrast, products may be described as complex assemblies of interacting components for which parametric models are built to represent design decisions, shape, size, and the configurations, which then are manipulated to maximize performance objectives. In spite of the literature and managerial intuition, marketing and manufacturing often pursue functional goals that are conflicting with each other and counterproductive to the performance goals of the firms (Shapiro, 1977). In other words, the Measurements of “success” differ between the two disciplines, with marketing assessing degree of market fits, consumer satisfaction, overall share, and ultimately focus on the growth of market share. On the other hand, engineering design concerning technical performance, innovativeness, and cost effectiveness; the two disciplines even point to different critical success factors external to the design process itself. (Michalek, Feinberg, Papalambros, 2005)

In order for a better competitive performance, it is necessary for the company to achieve the operational synchronization between marketing and manufacturing by alleviate the disciplinary boundaries, and increase the levels of communication and consensus among

the marketing and manufacturing; there are several researches been conducted upon this matter by integrating the Quality Function Deployment (QFD) with marketing management.

3. Prior Marketing and QFD integration:

In the research “Integrating QFD, AHP and Benchmarking in Strategic Marketing” 1994) the authors claim that “to be competitive, long-range planning and customer satisfaction must be integrated into the company’s strategy.” In order to deal with this challenge, the authors suggest developing an effective marketing policy that not only consist of a set of data about a company’s current and projected market share and sales volume in order to determine its future performance. Rather, it should take into consideration the needs and demands of customers, society, and the global community and integrate them in a sense that defines the business reality. In other word, the authors’ view a marketing policy that should link the company’s vision, mission, operating principles and quality values into one closely-knit totality with its main focus to satisfy the needs of current and future customers and society. (see figure below)

In addition, the author suggests “an effective marketing policy must be based on the principles of total quality management (TQM), and customer orientation.” By using TQM, the company’s marketing policy can further investigate the customer requirements, and by “continually emphasize meeting customers’ needs and reasonable expectations” (Berry, 1991) the authors believe: “TQM focus on customer orientation allows the company to meet customers’ and the society’s needs while making profits. (Caruso, 1992)”

The author stressed that “Kano (1992) in his analysis of Japanese corporations, noted that a formal, analytical strategic planning process integrating with long-range planning is the key to: formulating corporate strategies; integrating different ideas; motivating employees; improving performance results; and changing corporation culture.” Yet, the

authors argue that “Kano does not discuss how a formal and analytical strategic marketing approach could be developed by a company.” Thus, the authors express the necessity of developing an integrative strategic marketing-planning framework to enable the company to formulate effective marketing policies by using feedback from the major forces that impact the company. And the authors explain the purpose of this research is to:

1. To develop a strategic planning framework for long-range marketing policy making
2. To explore the recent developments in strategic marketing orientation in relation to the current theories of TQM, and
3. To demonstrate how to apply two group consensus management techniques and competitive benchmarking to the development of strategic marketing policy

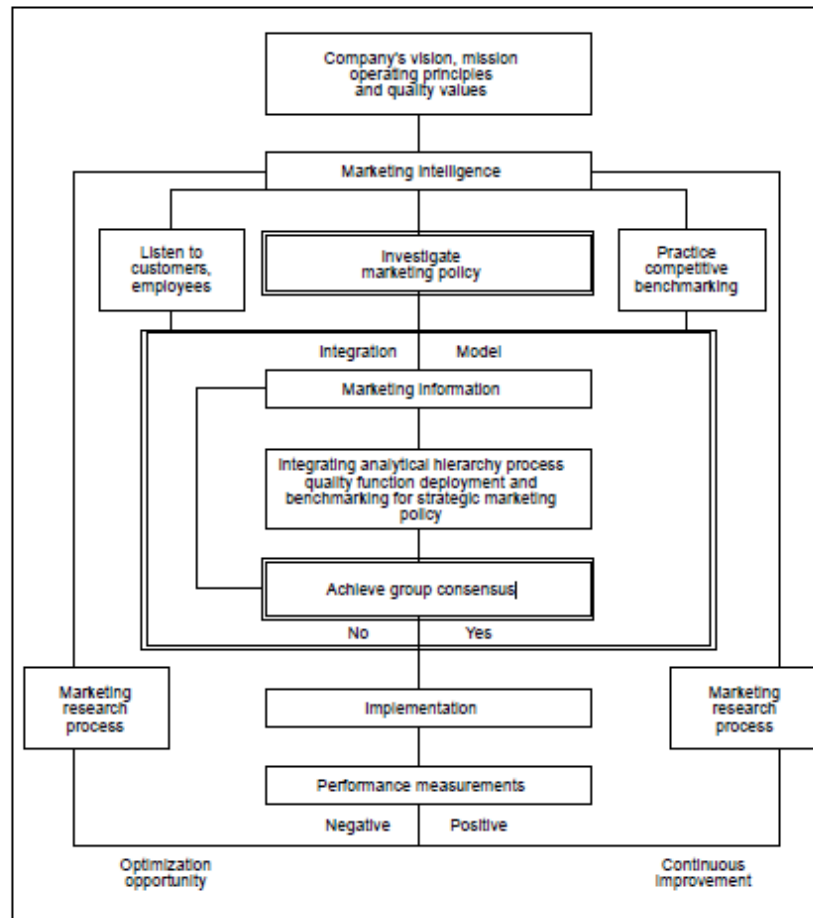


Figure 4. The Strategic Marketing Planning Framework (Integrating QFD, AHP, and Benchmarking in Strategic Marketing, 1994)

In the strategic marketing planning framework, the authors integrate Analytical Hierarchy Process (AHP), Quality Function Deployment (QFD), and Benchmarking, and use them for marketing policy analysis at the firm level. AHP has been shown to be useful in prioritizing alternative variables. QFD, on the other hand, is used in translating customers' need into specific organizational actions. (Madu and Kuei, 1993) By integrating these two concepts into the practice of strategic marketing planning framework, the authors believe it could eventually achieve three most important

advantages: creative inputs, consensus management, and group members' commitment.

3.1 Marketing relationship

The authors suggest by building long-term marketing relationship with the intended customer could benefit the company in terms of expanding the competitive advantages over the competitors and achieve the cost-efficient marketing operations. There are several marketing orientations that could ultimately assist the company “to develop long-term, mutually supportive relationships with their customers.” (Webster, 1992)

3.1.1 Value Marketing

The authors claim that focusing on the traditional “4Ps” marketing mix is no longer sufficient if a company is going to provide total satisfaction to its customers. The focus of Value Marketing is for the customer to get “more value for less money.” The authors further explain that “It is clear that consumers are increasingly sophisticated in their choice of products and are very value conscious.” Thus, by providing a better mix of attributes in exchange for less money would be a marketing policy that benefits in long term marketing relationship with the customers.

3.1.2 Volunteer Marketing

Authors believe by utilizing the concept of volunteer marketing, company employees voluntarily go out of their way to help other departments to provide customers with satisfactory service on all levels. Authors further explain, employees of functional departments other than marketing voluntarily go beyond their assigned

responsibilities and duties to help the company's marketing department to satisfy the needs of customers.

3.1.3 Total Marketing

Authors express the total marketing is focusing on the marketing structure of a company. Traditional marketing is a triangular structure, which means a top-down operating structure. Upper executives have the decision-making authority, and the staff managers should only supervise on the level of implementation. In the total marketing, the traditional top-down marketing structure ought to be turned upside-down. Authors consider "if the staff managers are empowered to a greater extent and are given the authority to day-to-day decisions; a company could react quickly to satisfying its customers' immediate demands."

3.1.4 Environmentally Conscious Marketing

According to Madu and Kuei (1993): The growing concern of consumers about the degradation of the environment should be emphasized in company's social responsibility; authors suggested that due to customer concern on the environmental crisis, companies should consider adding environmentally friendly features to its products and services, so that the companies could build the long-term mutual supportive relationship with the customers.

3.2 Analytical Hierarchy Process (AHP)

The Authors believe: "in order to minimize the risks involved in the development of new products and services, customers' requirements should be viewed

as a multi-criteria decision making problem.” AHP in this research is aiming at prioritize the customers’ requirements so the multi-criteria decision making problem can be measured in a consistence manner. In the research there are seven criteria presented for the purpose of improving customer satisfaction. To prioritize the criteria, professional judgment matrix would be implemented in order to obtain the AHP rating. “The professional judgment matrix is done using a nine-point scale to show the participants’ judgments or preferences of one criterion over the other; and these results show the degree of importance to which these features influence customer satisfaction.” (Dryer and Forman, 1991; Madu et al, 1991)

	Price	Service	Delivery	Feature	Performance	Variety	Reliability
Price	1	1	4	3	2	5	2
Service		1	4	4	2	5	2
Delivery			1	(2)	(2)	2	(4)
Feature				1	(2)	4	(3)
Performance					1	4	1
Variety						1	(4)
Reliability							1

Matrix entry indicates that row element is _____
1 equally 3 moderately 5 strongly 7 very strongly
9 extremely
preferable to column element unless enclosed in parentheses (Dyer and Forman, 1991).

Figure 5. The Professional Judgment Matrix (Dyer and Forman, 1991)

3.3 Benchmarking

Benchmarking is the process of “learning from the best” in terms of business strategies, business operations, and business processes. (Madu and Kuei, 1993) and Zairi’s (1992) three types of benchmarking is implemented in the author’s approach: Internal, external, and generic benchmarking.

1. Internal benchmarking: studies the best performers in an organization

2. External benchmarking: studies the best competitors in an industry
3. Generic benchmarking: studies the best business practices in the world

3.3.1 The integration model in strategic marketing planning framework

Authors describe the purpose of the strategic marketing planning framework as: “The integrative model is designed so that the marketer can determine which one of the marketing strategic orientations to select in order to serve his or her customers better.”

The following figure demonstrate how the AHP and Benchmarking concept can be implemented in the process of strategic marketing planning framework.

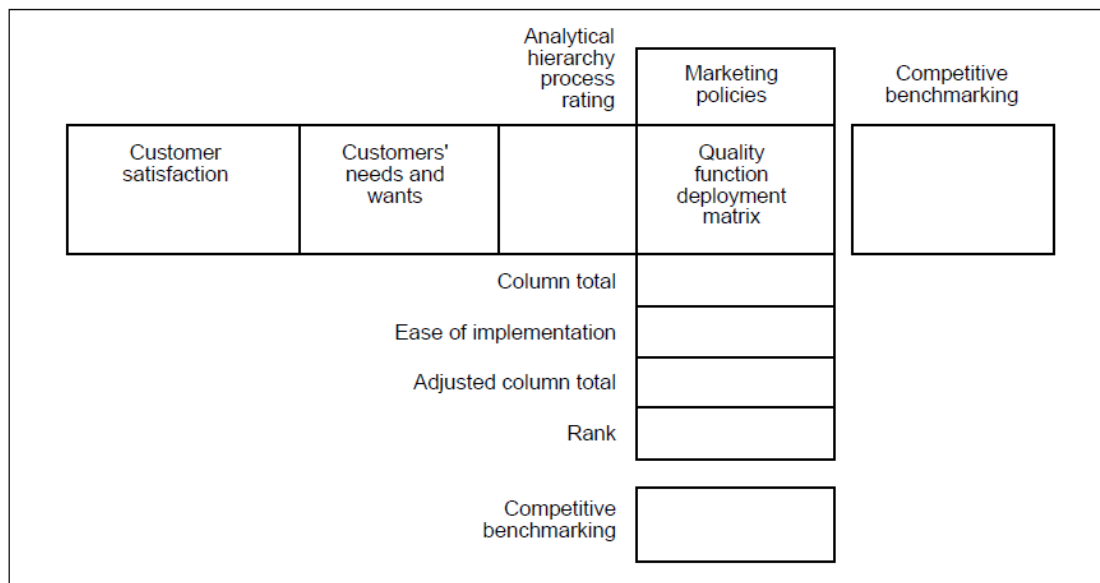


Figure 6. Integration Model-QFD Matrix with AHP Rating and Benchmarking
 (Integrating QFD, AHP and Benchmarking in Strategic Marketing 1994)

3.4 Linking customer requirements and marketing policies

When the prior preparation are done, author instructed that “once the marketing

policies, and AHP rating of customer satisfaction variables are determined, the team members can evaluate the relationship between marketing policies and customer satisfaction variables through quality function deployment (QFD).”

The authors suggest the procedure of using QFD to evaluate the strategic marketing planning framework includes the following steps:

1. Evaluate relationship between marketing policies and customer satisfaction variable.

“@” represents a strong relationship equal to “9”

“#” represents some relationship equal to “3”

“^” represents less relationship equal to “1”

2. Obtain column total for each marketing policies.

3. Evaluate the level of difficulty of implementation of each marketing policies

4. Obtain overall weight for each marketing policy

5. Rank marketing policies

In this presented case, Value marketing has the highest column total weights, and it demonstrates that the team members’ believe Value marketing policy has the strongest impact on achieving customers’ satisfaction. Moreover, authors claim “this formal analytical exercise on long-range marketing policy can motivate internal participants, integrate different perspectives and, most importantly, change corporate culture.

	Analytical hierarchy process rating	Marketing		Policies		Competitive benchmarking				
		Value	Volunteer	Total	Environmental Conservation	1	2	3	4	5
Price	0.250	@	^	^	#	B	AC			
Service	0.262	@	@	@	@			CAB		
Delivery	0.058	@	@	@	#	C	A	B		
Feature	0.087	@	#	#	@		B	C	A	
Performance	0.139	@	@	@	@				CAB	
Variety	0.037	@	^	#	#		AB	C		
Reliability	0.167	@	@	@	@				C	BA
Column total		9	6.182	6.256	6.93					
Ease of implementation		4	3	5	2					
Adjusted column total		36	18.546	31.28	13.86					
Rank		1	3	2	4					
Competitive benchmarking		C		B		A				

Figure 7. QFD, AHP, and Benchmarking

(Integrating QFD, AHP and Benchmarking in Strategic Marketing 1994)

3.5 The setbacks

In the research of strategic marketing planning framework (SMPF), it does show that the SMPF model could benefit the company to have a better understanding and facilitate enhanced investigation on the correlation between overall marketing policies and the customers' satisfaction management. Moreover, with the integration of Quality Function (QFD), Analytical Hierarchy Process (AHP), and Benchmarking, the model visualizes the long-term strategy toward the customer relationship management

in a sense that is clearly presented. However, in the research of integrating QFD, AHP and Benchmarking in Strategic Marketing, (1994) there are several issues that should be concerned.

The SMPF focus on evaluating the long-term strategic planning, it is difficult in transforming the result of SMPF to the implementation level. Author failed to discuss how SMPF could transform into the core operation of marketing planning; only by understand the relationship between marketing policies and customer satisfaction is not adequate to recognize the levels of detail in conducting a marketing plan.

The approach used a very extensive management prospective; the company might suffer by losing the levels of responsiveness in terms of operational swiftness. To convert a marketing policy could be resource consuming, which includes time, monetary resource, and human power; and yet, to solidify the favored marketing policy and exercise it into action might take excessive of energy for the company, it might diminish the company's competitive advantages and sacrifice the time to market. And that would ultimately cause a negative consequence for the company to be insufficient to cope with the ever changing market place.

Furthermore, the model suggests company should only pick the favored marketing strategic orientation to serve its customers. In the illustration, the value marketing was obviously the most important orientation by far; the authors explain: this is because the team members' perception is that value marketing orientation has the strongest impact on achieving customers' satisfaction. However, these marketing orientations were

developed with intentions to bring different aspects of impact to the company whereas serving for the same purpose within a organization. These marketing policies should be categorized into two groups when looking at the customer satisfaction management:

Value marketing policy aims to creating more value for less money for the customers, and environmental conscious marketing policy is to add environmentally friendly features to product/service, which in term could be view as one part of “creating more value for the customers.” since, these two marketing policies would have a effect on how the product/service could offer to the customer; and have a direct impact toward customer satisfaction. On the other hand, volunteer marketing policy enhance the team work capability between inter-departmental operations and total marketing focus on developing a better marketing structure; Volunteer marketing and Total marketing policies are intend to improve the internal operation efficiency, which only have no direct impact toward the customer satisfaction. Thus, these marketing policies should not be compared with each other since every orientation ultimately has significant contribution towards the overall company performance in different levels.

In the research of “Integrating QFD, AHP and Benchmarking in Strategic Marketing” (1994), the authors’ approach is insufficient for achieving better operational synchronization between marketing and manufacturing when consider the perspectives of the model responsiveness, and operational efficiency. Therefore, a planning tool that could better represent the essence of marketing operations is needed for harmonizing the interdependency relationship between marketing and manufacturing.

4. The Proposal of Strategic Promotion Quality Function Deployment (PQFD)

The Strategic Promotion QFD (Quality Function Deployment), presented in this article, is an innovative modification of the concept of Quality Function Deployment (QFD). It is a discussion tool that serves for the purpose of enhancing the marketing communication in both of the external and internal aspects; in the other word, to improve the marketing management and provide a positive contribution to the overall company performance. Moreover, by using the QFD mechanism, PQFD could also assist the coordination between marketing and manufacturing.

The Promotion Quality Function Deployment (PQFD) integrates two management concepts: marketing mix strategy and customer satisfaction. In order to deliver the idea of PQFD, it is vital to comprehend the fundamentals from the both area. Harvard's J. Culliton (1984) described the marketing executive as a:

“Decider,” an “artist”- a “mixer of ingredients,” who sometimes follows a recipe prepared by others, sometimes prepares his own recipe as he goes along, sometimes adopts a recipe to the ingredients immediately available, and sometimes experiments with or invents ingredients no one else has tried.

N. Borden remarks Culliton's idea: “Marketing executive is a mixer of ingredients, one who is constantly engaged in fashioning creatively a mix of marketing procedures and policies in his efforts to product a profitable enterprise.” As suggested, marketing mix is a tool that helps the user to organize the mixture of marketing operations that would

eventually benefits the organization in terms of increasing sales, expand marketing shares, and make the company image go upwards; in another word, to achieve the marketing objectives.

On the other hand, customer satisfaction is another very important factor for the success of the business. “Customer satisfaction is a growing concern to many leading companies throughout the world. More and more firms use satisfaction ratings as an indicator of the performance of products and services and as an indicator of the company’s future.” (Business week, 1990) Customer satisfaction reduced price elasticity, as satisfied customers are willing to pay more for high quality products and service. (Hinterhuber et al., 1997b) which means with better customer satisfaction, customers are willing to pay a premium price for the product that better fulfill their needs. Moreover, Reichheld and Sasser (1990) state that satisfied customer are likely to buy more frequently and in greater volume and to purchase other goods and services offered by the firm. This statement indicates satisfied customers would not only pay a premium price, but also buy in a greater volume. These statements explain the importance of customer satisfaction and how it could lead to the success of business. “Customer satisfaction is the ultimate objective of every business: not to supply, not to sell, not to service, but to satisfy the needs that drive customer to do business.” (Hanan & Karp, 1989)

Traditionally, market share in turn is seen as a result of offensive market strategies whose primary goal is to acquire new customers. But with the increasingly intense competition, low market growth rates and saturated markets make it much more difficult to grow on the basis of offensive strategies. In this context the costs of

attracting new customers are much higher than the costs of keeping the present customers through an increased level of loyalty. The American Marketing Association estimates that it costs five or six times more to acquire a new customer than to keep one. Customer retention strategies are becoming increasingly important. With increasing competition, customer retention or customer satisfaction strategies are becoming more important. The intention of these strategies are not in focus on capturing higher market share over the competitors, but then to gain sustainable competitive advantages within certain market segment that allow the firm to utilize its core competences, and to achieve a higher level of customer satisfaction and loyalty. (Matzler & Hinterhuber, 1998).

	Market Share	Customer Satisfaction
Typically in ...	Low growth or saturated markets	Low growth or saturated markets
Strategy type ...	Offense	Defense
Focal point ...	Competitor	Customers
Measure of success ...	Share of market relative to competition	Customer retention rate
Behavioral objective ...	Buyer switching	Buyer loyalty
Nature of market share ...	Rather quantitative	Rather qualitative

Figure 8. Market share versus customer satisfaction (Hinterhuber et al., 1997b; Fornell, 1992)

The above chart shows us the comparison of market share strategy and customer satisfaction strategy. The market share strategy adjusts its operation tactic according to the competition and would value its success through comparing the share of market. On the other hand customer satisfaction strategy seeks to defend the existing customer and to maintain the current market share. Market share was seen as the key part of each

market strategy. The maximization of market share should lead to the maximization of return on investment (ROI). (Fornell, 1992), this assumption is based on the effects of economies of scale and a considerable number of empirical studies. And this study confirms the customer satisfaction's impact of marketing share of profitability (Buzzel and Gale, 1987).

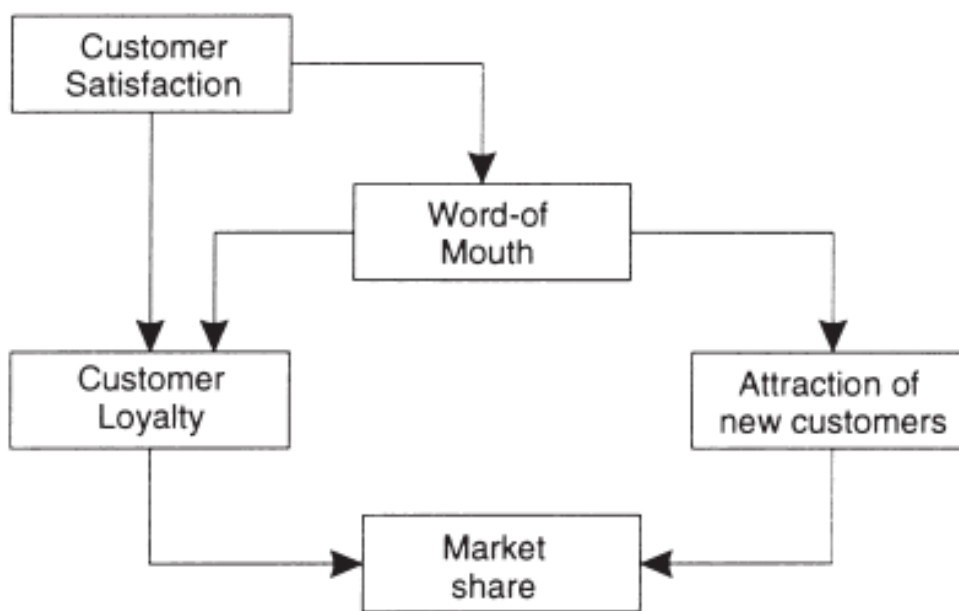


Figure 9. Market share as a consequence of customer satisfaction (Kordupleski et al., 1994)

The figure shows that the customer satisfaction could eventually consequence the market share. We can see it that with higher levels of perceived quality and customer satisfaction have additional effects on market share due to the positive quality image and positive word of mouth of satisfied customers. With satisfied customers provide positive word of mouth with the constructive messages to the potential customer and enhance the buying decision in turn of the attraction of new customers. Moreover, by satisfying the customer even after they have purchase the product, to enhance their

positive experience with the product might increase the customer loyalty. With high levels of customer loyalty and great attraction of new customers, the market share could increase as the result of high customer satisfaction. (Matzler & Hinterhuber, 1998)

Since the level of customer satisfaction would have significant impact toward the success of the business, to create and maintain the level of customer satisfaction should be concerned by every perspective within the organization. In Kotler's (2002) research upon the contemporary marketing management, he stated that "Marketing integrates the work of creating and delivering customer value and must have more influence on the rest of the organization"; he clarifies: "Marketing has traditionally been viewed as the department whose work was limited to planning and integrating the company's marketing activities. Marketing must go beyond operating as a department; marketing and customer-centric thinking must permeate the company's outlook, providing perspectives, principles, and practices intended to make customer value and satisfaction everyone's job." Thus, this message implied the responsibility of marketing management should not be limited merely on marketing activities planning, to make sure the other departments understand the marketing approach and function appropriately for the purpose of satisfying the intended customers.

Therefore, as the prior indications demonstrate the company's success factors would be influence by the effectiveness of marketing management, in terms of promotion planning and resource management, moreover, the coordination between marketing and manufacturing. It is crucial that the company to acknowledge the significance of this matter, and strive to improve.

4.1 The overview of Strategic Promotion Quality Function Deployment (PQFD)

The Strategic Promotion Quality Function Deployment (PQFD) presented in this article, is conducted for the purpose of enhancing marketing management, in terms of improve the effectiveness in promotion planning and resource management. In order to enhance the marketing management, it is necessary to have comprehensive planning tool that evaluates and ensure the effectiveness of resource management. Moreover, PQFD is a management and planning tool that is a mind-mapping-liked discussion method that enables the design team to be creative in generating the ideas; yet, not forfeit the rationality and practicality, so that the formalization does not compromise the freedom of generating creative ideas. Thus, by using the PQFD, the design team gets to simplify the marketing variables down to the essence of marketing operation and offers a comprehensive assessment on the resource management; as a result, PQFD could better present the nature of business and ultimately enhance the marketing management. Due to the QFD mechanism, PQFD could provide the functionality in prioritizing promotional messages and activities according to its importance in attracting intended customers; with the functionality of PQFD, the marketing department would be facilitate to have good measurement upon the resource management. By comprehending the levels of each promotional messages and activities could contribute to the overall marketing performance ahead of the actual marketing planning, the project could be more spontaneous when dealing with the resource allocations including: time, budget, and human resources. Expectably, with better resource management could consequence better effectiveness of marketing management.

Ultimately, by using the PQFD method, expectantly the coordination between marketing and manufacturing could also be upgraded for a better synchronized organization performance. In order to do so, the PQFD method would stressed on the perspectives of providing consensus outlook, and facilitating a positive reciprocal interdependency between the marketing design team and the other perspectives of the organization.

Krishnan and Ulrich (2001) claims: conflicts between marketing and manufacturing often cause by the disciplinary boundaries. The natures of the disciplines are long diverse from each other. With different foundation of philosophies; it result marketing and manufacturing have diverge product representation and success metric. Thus, in order to stress the difficulty of the communication between marketing and manufacturing we could describe it as communication between people from different countries. As Crowe and Chao (1996) argue, “the need for an effective interface that would allow both units to speak the same language is critical for achieving the ultimate goal: increased customer satisfaction.” Marketing operations are like a foreign language to manufacturing, and it is vice versa for the marketing to understand manufacturing operations. So the QFD was created to translate the marketing requirements for manufacturing, because engineers generally use “intuition” when dealing with customer needs. (Papalambro, 2005) In other words, and the conventional QFD was conducted to serve manufacturing to alleviate the confrontations with marketing, and “to transform user demands into design quality, to deploy the functions forming quality, and to deploy methods for achieving the design quality into subsystems and component parts, and ultimately to specific elements of the manufacturing process.” (Akao,) Since QFD’s transformational functionality, it allows the manufacturing design team to facilitate

accurate interpretation from user demands into design quality; as a result, QFD could advance the manufacturing management. To further enhance the communication between marketing and manufacturing, PQFD was created to improve the understanding between both sides. By using PQFD, Marketing is enabled to employ the QFD mechanism, which is the language of manufacturing, to explain the marketing operations with the manufacturing; it makes the marketing policies easier to comprehend by the manufacturing department since PQFD allow marketing to speak the language of manufacturing in expressing the marketing policies; PQFD explains Marketing's outlook, and the approach to the customers. In addition, by using PQFD, marketing department get to realize the concept of QFD, so the marketing could also gain better understand when dealing with manufacturing operations. The consensus and coordination among both departments could be enhanced through improving the mutual understanding between marketing and manufacturing.

The following diagram outlines the purpose of Strategic Promotion Quality Function Deployment (PQFD):

PQFD is conducted for the purpose of enhancing the marketing management

- Amplify the effectiveness in promotion planning
- Offers effective evaluation in resource planning

4.2 The structure of PQFD

In this paragraph the structure of PQFD would be demonstrated through using a practice case to illustrate in detail. The following figure is the basic framework of

functionality. The Super dryer aim to offer the top notch performance in luxury features, as well as the hair care functionality.



Figure 10. Mind Mapping

Table 2. Promotion Quality Function Deployment (PQFD) Part 2

customer requiriement	SP	ITC	Product					Promotion					Place	Price	Benchmarking					
			Maketing metrix	Packaging	Branding	5 senses	garuantee	TV advertisement	internet Advertisement	billboard	magazine ad	product placement	sales display	TV shopping	retailing	premium pricing	budle sales	company A	company B	Company C
Safe to use																				
Reliable																				
Dry Fast																				
Luxury																				
Hair care																				
Ease to store																				
Benchmarking																				
Company A																				
Company B																				
Company C																				
Activities Score																				

4.2.1 Customer requirement

In PQFD, customer requirements would be the same user demands that used in QFD. Customer requirement indicates what are the product features and characteristics that customers would like to have in the product. In the case of promoting brand S dryer, the customer requirements include the conventional functionalities of dryer: such as able to dry the hair, and can be stored easily, and safe to use. Yet, the Super dryer is positioned as high end dryer. As the positioning suggests the customer requirements also include hair care functionality and luxury features to differentiate it from the competitors.

4.2.2 Marketing matrix

In PQFD, Marketing matrix includes the marketing mix concepts: product, promotion, place, and price elements. In the marketing matrix, based on the principle of marketing mix, the marketing operations or activities that could help in expressing the product characteristics should be listed in the columns; in another word, the 4Ps strategic planning should be integrated in the marketing matrix section.

It is important that we investigate the association between customer requirements and the marketing matrix, because the essence of promotion is to create the right message through the right channel to inform the intended customers. The customer requirements would be transformed into product characteristics/design qualities through the method of QFD, which product characteristics would then become the promotion messages since promotion is to inform the intended customers about how the product could serve

to their needs. Marketing would then engage the promotion activities that centering on the purpose of delivering those promotion messages to the intended customers, and that is where the PQFD could be implemented for.

As for the Super dryer case, the customer requirements and marketing matrix are presented in the table 2. To note that the luxury characteristic and the hair care functionality are stressed in this section. In the marketing matrix section, there are promotional activities that could potentially express the product characteristics would be listed above. For example: to express the characteristic of reliability for Super dryer, what are the promotion methods or channels that could help to do so? In this case, provide 1 year guarantee to cover the machinery failure could be one promotion method that express the company supports the customers and hope to ensure the quality of its dryer; thus, offer guarantees could be one way of expressing the characteristic of reliable. Then we evaluate each listed promotion activities to in term of #0 #3, #6, and #9 to represent the effectiveness of the specific promotion activity in expressing the product characteristic to its potential customers. Yet, in the conventional QFD uses #1, #3, and #9 to represent the correlation between customers need and manufacturing specification; the reason for PQFD to employ a different set of numbers to symbolize the importance is due to the following reason: In the conventional QFD, the correlations between customer needs and manufacturing specification are much apparent to its users in term of identifying the associated evidences; if in the dryer exercise, the customer requirement is “dry fast”, then the correlated engineering matrix could be affected by the air supply, and the size of the motor, and such kind of engineering functionalities; therefore, with #1, #3, and #9 numbers to score the correlation could allow the final

score to be obvious and easy to recognize the difference in between the engineering features. Yet, in the case of PQFD, with only #1, #3, and #9 sets of numbers to evaluate the correlation between marketing activities and customer requirements would affect the final score to be too extreme to realize the promotion planning. Thus, in PQFD with four equally distributed symbolic indicators could better represent the participants' judgment, the participant could respond better due to the set of numbers offers more variety in marking the effective of expression. The following table expresses the level of expression:

- #0: Have little or no impact in expressing certain product characteristic
- #3: Have small impact in expressing certain product characteristic
- #6: Have medium impact in expressing certain product characteristic
- #9: Have large significant in expressing certain product characteristic

Table 3. Promotion Quality Function Deployment (PQFD) Part 3

customer requirement	SP	ITC	Product				Promotion					Place		Price		Benchmarking			
			Packaging	Branding	5 senses	garantee	TV advertisement	internet Advertisement	billboard	magazine ad	product placement	sales display	TV shopping	retailing	premium pricing	budle sales	company A	company B	Company C
Safe to use	0.5	0.05	3	3		9	3	9	3			3		9	3				
Reliable	1	0.1		6	6	9	3	3						6	3				
Dry Fast	0.5	0.1			6			3		3				3					
Luxury	1.5	0.3	6	9	6		9		6	9	6	6	3		9	3			
Hair care	1.5	0.4		6	3	3	6	6	6	6		3	9		6	6			
Ease to store	0.5	0.05	6				3							3	3				
Benchmarking																			
Company A																			
Company B																			
Company C																			
Activities Score																			

4.2.3 Importance to Customer (ITC) and Unique Sales Point (SP)

In the table 3, it is the scoring stage of the PQFD model. The Importance to Customer (ITC) and Unique Sales Point (SP) columns have been computed in the model; these two ratings have great impact towards the final scoring evaluation, it is crucial for the participants to notice the logic behind it.

First, Importance to Customer (ITC) is a tool that measures how important each customer requirement is, then by using numerical figures to represent the significance. In the ITC analysis, we would ask the intended customers to weight the importance of each requirement according to their preferences on a total of 100% scale measurement; and depends on how each requirement weighted, the total score would be influenced

compatibly with the ITC.

On the other hand, the Unique Sales Point (SP) rating represents the attractiveness of each customer requirement to the intended customers. The concept of Kano's effect has great influence to the SP rating, since in Kano's model, the product features could be evaluated in three perspectives: features that exceed the customer expectation, features that satisfy customer requirement as it is to how customers want it; and features that below the customer expectation. According to these three levels of attractiveness, PQFD would implement the unique sale point in three levels as follow: # 1.5, it represents the features that differentiate the product from the competitors, and serve beyond the customer expectations. # 1, it indicates the features that provide benefits as how customer expected it to be. And finally, # 0.5 means features that are must-have features, the fundamental features that are obligated to have on the product. For example, when the original Prius hybrid vehicle came out, the promotion focus was upon its fuel efficiency, in other words, the technology of getting extra driving distance with less gas consumption; the Unique Sales Point in this case would be rated high due to this breakthrough functionality could offer differentiated competitive advantages over the competition; in Kano's model, the great fuel efficiency would be categorized as high satisfier, that exceed the customer expectations. However, in the Prius 2010 model, we could notice the focus on promoting fuel efficiency feature is less mentioned; it is because the customers were well informed about the hybrid functionality in the past, in another words, the feature have become must-have feature, a standard attribute for the Prius. Thus in the new champion, the emphasis on fuel efficiency feature could be trim down, so the limited resource can be allocated in promoting the other new features. The Unique Sales Point (SP) and Importance to Customer (ITC) would have significant

affect on the success of promotion plan, thus, to emphasis the importance of SP and ITC, the two scores would consequence greatly toward the final scores.

The formula for the Message Score (MS) and Activity Score (AS) would be listed as follow:

The calculation of “Message Score” is formulated: (1)

$$f(MS) = \sum (ES) \times (SP) \times (ITC)$$

Message Score (MS)
Expression Score (ES)
Unique Sales Point (SP)
Importance to Customer (ITC)

The Promotion Score (PS) is calculated: (2)

$$f(AS) = \sum (CS)$$

Activities Score (AS)
Channel Score (CS)

4.2.4 Message score and Activity Score:

According to Kotler, “Marketing management is to concentrate the organization’s resources on the best opportunities in increasing sales to achieve sustainable competitive advantages.” In every organization, the resources are limited, whether it is budget, time, or human resources, these resources have to be allocated effectively. In a promotion plan, all the promotion actions and messages have different levels of impacts and influences; therefore, it is essential for the marketing personnel to understand the promotion activities and messages have different weights to the success of the business. With the Message score and Activities Score, the company gets to prioritize the importance of each message and activity, so the company could distribute its resource more effectively, “put the resources in where it counts.” In the Super dryer example, Luxury features, and hair care functionality scored as the top two factors in the message score, it means with limited resources, such as time, to air 30 seconds television commercial, not all of the features that can be demonstrated; as the PQFD suggests for the Super dryer, due to the luxury features and hair care functionality have better overall attractiveness toward the customers; it should be stressed prior to other features.

Table 4. Promotion Quality Function Deployment (PQFD) Part 4

customer requiriement	SP	ITC	Product				Promotion					Place		Price		Benchmarking					
			Packaging	Branding	5 senses	garuantee	TV advertisement	internet Advertisement	billboard	magazine ad	product placement	sales display	TV shopping	retailing	premium pricing	budle sales	company A	company B	Company C	Message Score	
Safe to use	0.5	0.05	3	3		9	3	9	3				3		9	3					1.125
Reliable	1	0.1		6	6	9	3	3						6	3						3.6
Dry Fast	0.5	0.1			6			3		3				3							0.75
Luxury	1.5	0.3	6	9	6		9		6	9	6	6	3		9	3					32.4
Hair care	1.5	0.4		6	3	3	6	6	6	6		3	9		6	6					36
Ease to store	0.5	0.05	6				3						3	3		3					0.45
Benchmarking																					
Company A																					
Company B																					
Company C																					
Activities Score			15	24	21	21	24	21	15	18	6	15	24	12	21	9					

The activity score, on the other hand, prioritize the promotion channels and activities so that the company could allocate resources to concentrate on certain activities. In the promotion plan, there are too many channels for the purpose of promoting the product; therefore, it is appropriate to prioritize the effective of each promotion activities and to find the suitable actions to take. In other words, with limited resource, how to allocate time, and human resource to achieve an effective promotion plan would be the consideration in this segment. In the Super dryer case, to enhance the brand image, to implement TV advertisement and the shopping channels would be the activities that topped should be focused.

4.2.5 Message Benchmark & Activity Benchmark

In the PQFD, as presented, there are two benchmarks; each of these benchmark were employed for evaluating two different elements of competitors' promotion strategies. First, the message benchmark, it demonstrates how the competitors' focus are in their promotion messages; in another words, it is a brief indication on how competitors manage its contents in the conversation with the intended customers. On the other hand, the activity score aim to emphasize the promotion activities that are implemented by the competitors. It indicates what channels were applied to engage promotion plan for the competitors.

4.2.6 Transfer PQFD score into Promotion Plan:

With promotion message score and promotion activity score, the marketing department could investigate the importance of each promotion element and conduct the initial planning. In the scoring stage, the idea could be generated through discuss with the team participants, it is recommended to record these ideas and review it after the scoring process was completed, so that the idea could be generated without the constraints of interference. Moreover, It is suggested to conduct PQFD multiple times along with the promotion project since the project based operation often experiences situations when the project objective was altered during the design process.

Table 5. Promotion Quality Function Deployment (PQFD) Part 5

customer requiriement	SP	ITC	Product				Promotion				Place		Price		Benchmarking			Message Score				
			Packaging	Branding	5 senses	garuantee	TV advertisement	internet Advertisement	billboard	magazine ad	product placement	sales display	TV shopping	retailing	premium pricing	budle sales	company A		company B	Company C		
Safe to use	0.5	0.05	3	3		9	3	9	3			3		9	3			3	6	9	1.125	
Reliable	1	0.1		6	6	9	3	3					6	3				9	6	3	3.6	
Dry Fast	0.5	0.1			6			3		3			3					6	3	9	0.75	
Luxury	1.5	0.3	6	9	6		9		6	9	6	6	3		9	3		3	3	9	32.4	
Hair care	1.5	0.4		6	3	3	6	6	6	6		3	9		6	6		3	9	6	36	
Ease to store	0.5	0.05	6				3					3	3		3			3	3	3	0.45	
Benchmarking																						
Company A			6	3		3	6	9	3		6	3			3							
Company B				6		6		6	3	9		3		3	9	3						
Company C			9		3	3	9		3		3		3		9	6						
Activities Score			15	24	21	21	24	21	15	18	6	15	24	12	21	9						

5. Verification of PQFD

In this segment, we would be using business cases to demonstrate the functionality of PQFD model.

5.1 Apple iPhone case study:

The case of Apple Inc's iPhone would be implemented in discussing the effectiveness of Promotion Quality Function Deployment (PQFD) method.

5.1.1 Industry Background:

When the first iPhone was launched, the smart phone market was still in the initial competitive environment. Many cell phone manufacturer, such as: Nokia, LG, and Blackberry were seeking to extend the prior success in the traditional cell phone market, and to expand product coverage to this new category of smart phone. Yet, even though Apple has long term experience in making the customer computing and electronic appliances, it was the first challenge for making personal mobile phone product for the company.

5.1.2. Product Information

iPhone was the first mobile phone product from Apple Inc, it is categorized in the smart phone market; with the ability of internet connectivity, and various multimedia functionalities. The most noticeable product characteristic is iPhone's display screen: The display integrated with the touch-screen that offers multi-touch capability and enables the virtual keyboard operation.

5.1.3. J.D. Power research

The J.D. Power Company, known for its research operations, have conducted a study upon the customer satisfaction among the smart phone products, including the big names of smart phone manufacturers were analyzed for the purpose of understand the customer satisfaction. In the J.D. Power's study, it implemented six evaluating factors that were selected by the customers: 1) ease of operation 2) Product reliability 3) Features 4) design 5) battery functions 6) network capability. In the PQFD model for iPhone, these evaluating factors would be employed as the customer requirements. Moreover, the participants for the J.D. power's study also rated the importance of each customer requirements for a smart phone, these Importances to Customer (ITC) rating would be implemented in conducting the PQFD as well. The direct competitors that were picked by J.D. Power are: 1) Nokia N95 2) Research In Motion Blackberry curve, and 3) LG Prada, PQFD would also includes these competitors to conduct benchmarking.

5.1.4 PQFD:

The PQFD exercise for iPhone is listed as follow:

Table 6. Apple iPhone PQFD

customer requirement	SP	ITC	Product					Promotion					Place		Price		Benchmarking					
			Packaging	5 senses	Branding	garuantee	TV advertisement	internet Advertisement	billboard	sponsoring	product placement	publicity	sales display	web sales	retailing	premium pricing	store credit	budle sales	RIM Blackberry cruve	Nokia N95	LG Prada	Message Score
Ease of operation	1.5	0.3			9		9	9	3		6	6	6		6	3	6	9	6	6	28.35	
Reliability	0.5	0.1			3	9				9				3	6	6		6	6	3	1.98	
Feature	1.5	0.2	3	3	6		9	9		3	6	9	3	9	3		6	3	6	6	22.68	
Design	1	0.2	6	9	9		6	3	3		9	6	9		6	3		3	6	9	12.4	
Battery function	0.5	0.1		3						3						3	6	6	3	3	0.68	
Network	1.5	0.1				3	9	9	3	6	5	5	3	6			3	6	6	3	8.58	
Benchmarking																						
Blackberry cruve				6	6		6	9	3		9		3	6	6	3	3					
Nokia N95					3	3	6	6			6		6	6	6	3	6	3				
LG Prada			9		9		9		6			9	3	3		9						
Activities Score			9	15	27	12	33	33	9	18	26	26	21	18	21	15	9	15				

5.1.5 Promotion Planning:

As the result of the PQFD listed above, the Ease of Operation, and Feature requirements were ranked in as the top two promotion messages that Apple should initially concentrate in promoting iPhone. The PQFD model suggests, ease to operate characteristics could be expressed through enhancing the Apple brand name since Apple is well known for its user friendliness orientation, also by using the television and internet advertisements, iPhone get to demonstrate its easy-to-use functionality to its potential customers. As for the customer requirement of feature, the PQFD also suggests

to use television and internet advertisements; moreover by crafting positive publicity, and utilize promotion in online sale, PQFD is indicating to make use of I-Tune store types of existing infrastructures. On the other hand, in the activity score, television advertisement, and internet advertisement finished as the most effective promotion activities for iPhone since most of the customer requirements could be expressed through the channels of TV and web ads; moreover, the model also suggests by enhancing the brand name, utilize positive publicity and provide product placement, iPhone's product characteristics could be well expressed through these promotion activities. In the resource management perspective, PQFD indicates the importance of each promotion activity through the activity scores; the marketing department could simply evaluate the necessity of execution through the weight on each channel. In this case, television and internet advertisements were rated as highest scores; therefore, these two promotion activities should consequently receive resources more than the others. In the message score, ease of operation and feature characteristics weighted as the top two promotion messages; thus, the company should allocate most efforts in promoting these two characteristics.

5.1.6 Apple's Promotion Strategy:

In the practical promotion strategy, Apple implemented various types of promotion. First, before the iPhone was announced, there were speculations and rumors around Apple were going to extend the success of beloved iPod product into the smart phone industry. Then, on January, 9, 2007, Apple made the initial announcement on iPhone; however, the information was limited. It was until June, 29, 2007; Apple finally launched and introduced the iPhone to the US market. And from there, iPhone was

greatly appreciated by the society. In order to compare the results from PQFD and the real practice, the major components of iPhone promotion mix would be selected in compare with the PQFD result in the following paragraph.

5.1.7 Assessment:

First, television commercial would be accounted for large amount of efforts in the iPhone's promotion strategy. Apple implemented four sets of iPhone TV commercials to introduce iPhone's functionalities. These commercials consist with promotion messages:

- Commercial #1: (there is never been a iPod that can do this...)
 - Ease of operation → Music → Movie → Picture → Call
- Commercial #2:
 - Ease of operation → Music → E-mail → Web connectivity → Call
- Commercial #3:
 - Ease of operation → Movie → GPS → Web connectivity → Call
- Commercial #4:
 - Ease of operation → Web connectivity (operation) → Call

We could see that in these four commercials, the promotion messages were comparable with each other. The promotion message of Ease of operation, multimedia features, web connectivity, and of course the call function were mentioned in all four sets of commercials. In the PQFD, the result of activity score also suggests to implement the TV commercial in promoting iPhone. Moreover, as the message score suggests that

Ease of operation, features, design, and network connectivity functions should be concentrated in the television commercial.



Figure 11. iPhone commercial #1 and #2

In iPhone commercial #1, starts with the statement: “there is never been an iPod that can do this....,” to demonstrate that iPhone could not only offer the iPod liked music device functionality, it could provide many more functions beyond its predecessor. This is an extension on the iPod success into carrying the brand value towards the iPhone promotion. This factor could also be identified in PQFD model; by extent the existing brand, iPhone get to inherit the impressions of iPod. In the PQFD, since branding could express the easy to use multimedia features, and fashionable design characteristics, the activity score of branding has second highest weight among others. Third, the publicity promotion activity was highlighted in the PQFD method as the information about how the product would be operated, and what are the features iPhone could offer. The publicity was well employed throughout the iPhone campaign, it create tremendous amount of anticipation for the customers, and stimulate customers curiosity. Prior to the announcement, there were many rumors and speculations about every aspect of iPhone. The primary considerations in iPhone promotion strategy could be reflected in the

presented model since the result of PQFD does share a level of similarity with the real practice. PQFD also address the product placement as third highest promotion activities among the promotion activities since by placing iPhone in the popular TV show, or used by famous people in certain situation; it could influence or convey the intended customers. However, this promotion activity was not implemented by Apple. This indicates even PQFD could provide direction for in promotion planning, yet, to come up with actual promotion mix would still need to be deliberated through by the marketing personnel.

5.2 Sony Bravia HDTV:

5.2.1 Industry Background:

The high-definition LCD television (HDTV) market is dominated with five major corporations in the world: Sony, Panasonic, and Sharp from Japan; Samsung and LGE from Korea. These five companies account for over 60% of the HDTV shipment worldwide (Displaysearch). Due to the maturity of HDTV technology, these companies could offer same level of product quality; thus, the intended customers are elastic towards the pricing element of HDTV. Samsung is the current market leader in terms of sales volume.

5.2.2 Product Information:

Sony's Bravia is a product line for Sony's high-definition LCD televisions; the naming of Bravia is an acronym for "Best Resolution Audio Visual Integrated Architecture". In this discussion, only the W5 and F5 series, which offers the motion

flow functionality, are implemented in investigating the effectiveness of Promotion Quality Function Deployment (PQFD) method.

5.2.3 J.D. Power Study:

In this case study, the customer requirements and the importance to customer (ITC) ratings are also provided by J.D. Power's study on customer satisfaction of High Definition Television (HDTV). According to the study: 1) Design: evaluate the overall styling features of the product. 2) Functionality: evaluate the effectiveness of functions and capabilities. 3.) Display/sound quality: evaluate the quality of picture and sound features. 4) Television operation: evaluating the process speed or responsive time of television. 5) Remote controller operation: evaluating the effectiveness of remote controller in terms of features and responsiveness. These factors were defined as the customer requirements. In J.D. Power's research, customers satisfy with Sony's Bravia the most; following by Panasonic's Viera series and Sharp's Aquous series. Sony Bravia has the highest scores in Design, television operation, and remote controller operation factors.

5.2.4PQFD:

Table 7. Sony Bravia HDTV PQFD

Sony Bravia HDTV

		Product				Promotion				Place		Price			Benchmarking						
Marketing metrix		Packaging	5 senses	Branding	Guarantee	TV advertisement	internet Advertisement	Sales Display	Magazine	Endorser	TV Shopping	Retailing	Premium Pricing	High-low pricing	Bundle sales	Toshiba Regza	Sharp Aques	Panasonic Viera	Total		
customer requierement	SP	ITC																			
Design	1	0.28	3	6	6		9	6	6	6			6	3	6		9	3	6	17.64	
Display/sound Qaulity	1.5	0.23	3	3	6	3	6	6	6	6	3	6	6	6			3	9	6	22.77	
Functionality	1.5	0.25	3	6	3	3	6	9	3	3	9	3	6	9	6	6	3	6	9	28.13	
TV operation	0.5	0.13			3	6	6	6	3		3		3		6	3		3		2.54	
Remote Controler	1	0.10				3						3	3				3		3	0.90	
Benchmarking																					
Toshiba Regza				6	3	6	3		3	3	9	6	3	3	3						
Sharp Aques			3	3	9	3	9	3	9		3	6	6	9	6	6					
Panasonic Viera			3		6	3	9	6	9		9	3	6	6		9					
		0.99	9	15	18	15	27	27	18	15	21	12	18	21	21	15					

5.2.5 Promotion Plan:

In PQFD, the functionality requirement was rated as the highest score among promotion messages, follow by the display/sound quality. These two promotion messages should be viewed as the priorities in communicating with the intended customers. PQFD suggests that in expressing the functionality features, Television and Internet advertisements should be implemented, also with the appropriate endorser exposed the functionality on television, it is possible to attract customer in wanting to know about the logic behind the functionalities. Thus, by providing detail explanations of the new functionalities, the intended customers would be interested to receive

information, the company should provide those detail information on internet. Moreover, it is suggested in PQFD that by enhancing the brand image of Sony, high quality multimedia design, it could embrace expression of display/sound quality, moreover, to enhance the Display/Sound quality, the company should put efforts in planning and decorating the sakes display showrooms. Television and Internet advertisements were rated as the most important promotion activities. To note that the high-low pricing strategy also rated receive high scores among the promotion activities; high-low pricing strategy would be useful in this situation, because HDTV come in various size, and different features, by offering high rank model, low rank model, and to offer the best combination between price and features in the middle line up to engage the customers' purchase decision. In the resource management perspective, PQFD suggests the company to allocate the resources in the television and internet advertisements, with endorser who fit with the product image and being able to deliver product promotion messages to intended customer with certain levels of impact.

5.2.6 Assessment:

In Sony's promotion, the emphasis on the display/sound quality messages can be identified with two series of commercials Sony aired.



Figure 13. Sony Bravia HDTV's "Color, like no others" commercial

In this campaign, Sony focuses on telling the customer about Bravia's display quality in terms of the color expression; "Color.... Like no others" this catchphrase stated the main message for this campaign. By using the rainbow liked color balls to represent Bravia's color variations and performance; this advertisement was well designed in symbolization the display quality.

"Paper flip cartoon"



Figure 14. Sony Bravia HDTV's "Color, like no others" commercial 2

In this campaign, Sony implemented the paper flip cartoon in expressing the new display quality in the television commercial. It not only shows how smooth the display quality is, the logic behind these technical upgrades was also demonstrated through an easy-to-understand manner.

5.3 Genesis Social Welfare Foundation

5.3.1 Industry Background:

According to Simaraya Research Foundation (喜瑪拉雅研究發展基金會), in 2005, there are total of 600 non-profit organizations in Taiwan, these NPOs serve in many different purposes. Within those NPOs, Genesis Social Welfare Foundation (GSWF) is one of the most famous charity organizations, which was established in 1986. The missions of GSWF are: bringing the social awareness and allocate social funds to those in need.



Figure15. Geographic position of Rou-Don

GSWF primary dedicate itself in three types of social works:

- 1.) Work for the welfare of patients in a persistent vegetative state (PVS)



Figure 16. PVS facilities

- 2). To look after the elderly
- 3). Helping the homeless

5.3.2 Event Information

In this case study, the Genesis Social Welfare Foundation's (GSWF) newest campaign "Persistent Vegetative Stage (PVS) in Rou-don" will be used in discussing of PQFD. Rou-don is a small city located in Yi-Lang province in Taiwan. Rou-don consist population of seventy thousands, yet, due to younger population gradually migrated to seek for better job opportunities in other city, the senior populations are not able to take care of those PVS patients, this phenomena might harms Rou-don in various ways in long term perspective. Thus, GSWF sense the need to help and decided to raise fund for constructing PVS caring center in order to facilitate the patients. In this campaign, GSWF hope to target female participants from age 25 to 50, because the female participants have more awareness to the subject and they are more likely to participate in the charity events. Thus, in order to attract participants to denote, GSWF usually offers varieties ways for encouraging the participants to contribute. Such as, by doing charity concert events or selling souvenir. Rou-don have been famous for its agricultural

products, by mechanizing these local products included food, clothes, and others with slightly higher price, GSWF get to raise funds meanwhile supports the local industries.

5.3.3 Genesis feedback

Lang Chu-Yao, the junior marketing specialist of GSWF, as one of the marketing team member for the Rou-don project, he described the Customer Requirements for the Rou-don campaign: 1) Social contribution, 2) Feel good, 3) Support Local community 4) Recognized for good, 5) Tax benefits. In the marketing mix, in order to enable various ways for the participants to donate, this includes both of direct and indirect donations. For the direct donation, GSWF offers online and mail donation channels; furthermore, participants could also choose to make contribution by adopting PVS medical equipments. On the other hand, the indirect donation would be engaged through merchandising and hosting charity events; by selling souvenirs or event tickets with premium price, and the revenues would be allocated towards the benefits of Rou-don PVS facilities. In this case study, Mr. Lang not only proving detailed information upon the Rou-don campaign, but also participated in discussing the following PQFD. By judging against the promotion mix in practice, the result of following PQFD will be used in evaluating the effectiveness of PQFD.

5.3.4 PQFD:

Table 7. Genesis Social Welfare Foundation’s Rou-Don

PQFD

Genesis Social Welfare Foundation

	Marketing metrix	Product					Promotion					Place		Price		Benchmarking			Total		
		Merchandising	Events	Branding	Adoption	TV advertisement	internet Advertisement	billboard	Blog	Poblication	Telephone Donation	Direct Donation Mail	high low pricing	Installation Payment	auction	Tzu Chi Fundation	World Vision Taiwan Fundation	Eden Social Welfare Fundation			
customer requirement	SP	ITC																			
Social Contribution	1.5	0.30	3	3	6	6	9	9	6	3	3	9	9	6	3	3	9	6	6	35.10	
Feel Good	1	0.20	3	9	3	6	6	6	3	6	3	3	3	3	6	6	6	6	3	13.20	
Logcal Support	1.5	0.25	9	3	3	6	9	9	3	3	3			3	3	6	6	9	6	22.50	
Recognizaed for good	1	0.15	6			9	3	3		3				3		6	3	6	9	4.95	
Tax Benefit	0.5	0.10			3			3			9	3	3				6	3	3	1.05	
Benchmarking																					
Tzu Chi Fundation				6	6		6	9	3		6	3	6	6	3	3					
World Vision Taiwan Fundation					3	3	6	6		3	3	6	6	6	3	6					
Eden Social Welfare Fundation			9		9		9		6	6	3	3	3		9						
			1.00	21	15	15	27	27	30	12	15	18	15	15	15	12	21				

5.3.5 Promotion Plan

In this PQFD table, the message score of social contribution have landslide lead over other promotion messages; it is the most important message to tell the intended customers. In the message score, coming in second is the local community support requirement; PQFD suggests that customer be attracted through helping the local business or enhance the local facilities for Rou-don. On the other hand, the promotion score proposes that internet advertisement would be the most importance activity in the promotion activities since every customer requirement could be expressed effectively through this promotion activity. Following by TV advertisement, the media

outputs for this campaign were determined as most important element in the promotion mix. Then facility adoption and merchandising also were addressed by PQFD, facility adoption as the direct donation channel and merchandising as the indirect donation channel, since these two activities have great impact in expressing the messages of local community supports and recognized for good.

5.3.6 Assessment

According to Lang, for promoting Rou-don charity campaign, GSWF's promotion is taking the approach of pull strategy, which is to attract participants in wanting to know about the campaign details. Thus, GSWF emphasizes on constructing the special website for the campaign and use the website as an information hub that linked to other promotion activities; moreover, cost saving is another concern for this project, therefore, as internet infrastructure was the existing resource, by expanding the accessible resources, GSWF could provide outputs with minimum efforts. The messages presented in the website were: the message of social contribution was mentioned in the home screen of the website with videos and vivid pictures; the videos were aired on television to bring the participants' awareness on the matters.



Figure 17. Rou-Don campaign webpage #1

The message of supporting local community was endorsed by a famous local TV star in the videos, moreover, in the main-pages; both of the direct donation and indirect donation were presented in merchandising the Rou-don local food, products and souvenirs, and showing how the PVS medical facilities could be improved through participants' donation.



Figure 18. Rou-Don campaign webpage #2

The Rou-don PVS nursing house would also have a “Thank You Wall”, names of those participants who donate over certain amount would be printed on the wall; as well as for the medical machines, participants' names would be on those machines they adopted. Moreover, hyperlinks to auctions of the local TV star's personal objects, and funds that were collected through the auctions would also contribute to the Rou-don campaign. In the sub-pages; the charity concerts and donation events information were listed.

5.3.7 Implementation:

During the discussion with Mr. Lang by using the PQFD model, we have found

by using blogs to promote the Rou-don charity campaign could bring younger generations to be aware of the matter without significant expenses. Thus, Mr. Lang proposed this idea to the marketing design team; the idea was implemented in Rou-don campaign. The following figures are the web pages that were used in the blog. This implementation of Blogs in the Rou-don campaign indicates PQFD could provide positive reinforcement in promotion planning. The detail of Mr. Lang's evaluation on PQFD will be presented in the interview section.



Figure 19. Rou-Don campaign Blogs webpage #1

<http://blog.xuite.net/cswftw/love>



Figure 20. Rou-Don campaign Blog webpage #2

<http://photo.xuite.net/cswftw>

6. Validation of PQFD

In this research, we emphasize on discussing the rationality of PQFD method; therefore, the interview method is implemented to collect feedbacks from the intended users. Due to the openness of quantitative interview method, the hidden concerns of PQFD model could be exposed through conducting detail interview sessions. The sample size is relatively small, yet, the interviewees are marketing professionals and professionals that have involved in the project operations and resource management; therefore, the effectiveness of PQFD could be demonstrated.

6.1 Interview:

Strategic Promotion Quality Function Deployment (PQFD) Interview

Average score

1~5 point scale

External:

- Idea:
 - Idea generation: 4
 - Idea creativeness: 4.1
- Promotion Planning:
 - Consistency with organization policies: 4
 - Interdepartmental communication: 4.3
 - Planning efficiency: 4
 - Correctness in represent the marketing operation: 3.33

Internal:

- Discussion tool:
 - Discussion process: 4.33
 - Ease of operation: 4.17
 - Ease to participate: 4.33

Interactive:

- Promotion data recording: 3.83
- Impact of PQFD to the data management: 3.83

Resource management:

- The necessity of prioritize the promotion messages & activities: 4.33
- The effectiveness of PQFD in resource planning: 4.17
- The impact of PQFD to resource management: 4.67

Others:

- If you are the project manager, would you like to implement this model: 4.33
- The value of PQFD in Promotion planning: 3.83
- The value of PQFD in Resource management: 4.5
- The value of PQFD in Marketing management: 4.08

6.2 Interview data analysis

The participants for the interview, acknowledged the fact of Promotion Quality Function Deployment (PQFD), as an discussion tool, by prioritized the marketing activities and messages, it could ultimately help in marketing operations and to have effective resource planning; moreover, to a certain extent, PQFD could capture the essence of marketing in promotion planning; yet, it is also been expressed that PQFD might not be effective in the promotion planning, unless when the customer requirements are determined accurately, since the evaluation of PQFD depends on valuing customer requirements; thus, if the customer requirements were not carefully evaluated, the result of PQFD could mislead the project under a great risk. Moreover, the PQFD model's objectiveness would be affected by the number of practice and participants. PQFD valuation process could be subjective if the numbers of participants are relatively small. The further research on Strategic Promotion Quality Function Deployment (PQFD) is still needed, yet, in this research the findings demonstrate the potential of this method in

helping the marketing management. The actual interview data are attached in the appendix.

7. Conclusion:

The objective of this research is to explore Strategic Promotion Quality Function Deployment (PQFD), a discussion tool that could help the marketing management in terms of improving the effectiveness in promotion planning and providing useful resource evaluation. PQFD was evaluated through the research methods of case studies and interview with the professionals. As the results of interview, PQFD method scored 4.5 out of 5 point scale in the resource management perspective, it indicates that as a planning tool, PQFD method have positive impact for resource management since PQFD provides the functionality in prioritizing the critical factors of marketing. On the other hand, in the promotion planning perspective, PQFD scored 3.83 out of 5 point scales; this result signifies the PQFD is still inadequate to provide concrete evidences to show its competency in promotion planning, it is necessary to have further research upon this matter; yet, as in the Genesis Social Welfare Foundation case, PQFD did demonstrate its aptitude of discovering promotion insights; moreover, PQFD scored 4.08 out of 5 points in improving the effectiveness of marketing management, and scored 4.33 out of 5 points as the participants indicate they would like to implement PQFD method when they are in marketing project. In conclusion, PQFD, as a discussion tool that generate systematic process of discussion in a timely manner, and provide directions in promotion and resource planning under brief guidance, could have the potential in improving the marketing management.

Reference:

Borja de Mozota, Brigitte, and Robert Veryzer. "The Impact of User-Oriented Design on New Product Development: An Examination of Fundamental Relationship." *Journal of Product Innovation Management* 22.1 (2005): 128-143. Web. 10 Jan 2010.

Caruso, T.E. "Kolter: Future Marketers Will Focus on Customer Database to Compete Globally." *Marketing News* 26.12 (1992): 12. Web. 25 Dec 2009.

Cohen, Lou. "Quality function deployment : how to make QFD work for you ." *Addison-Wealey Publish Company* 01. (1995): n. pag. Web. 11,jan 2010.

Deane, Richard, Patricia McDougall, and Vidyaranya Gargeya. "Manufacturing and Marketing Interdependence in New Venture Firm: A Empirical Study." *JOURNAL OF OPERATIONS MANAGEMENT* 10.3 (1991): 329-339. Web. 2 Feb 2010.

Hauser, John, and Don Clausing. "The House of Quality." *Harvard Business Review* May-June (1988): n. pag. Web. 2, Jan 2010.

J.D., Power Asia Pacific. "A study on Customer Satisfaction of HDTV ." *McGraw-Hill Companies* (2009). Web. 9 Jan 2010.

J.D., Power Association. "2009 Wireless Business Smartphone Satisfaction Study." *McGraw-Hill Companies* (2009)Web. 12 Jan 2010.

Kotler, Philip, and Becky Reed. *How to Start & Maintain a Profitable Sewing Business.*

Innovations Press, (2006). 57-60. Print.

Madu, Christian, Chu-hua Kuei, DENA Winokur, and Min Hua Lu. "Integrating QFD, AHP and Benchmarking in Strategic Marketing." *Journal of Business & Industrial Marketing*. 9.1 (1994): 41-50. Print.

Matzler, Kurt, and Hans Hinterhuber. "How to make product development projects more successful by integrating Kano's model of customer satisfaction into quality function deployment." *Technovation* 18.1 (1998): 25-38. Web. 11, Jan 2010.

Michalek, Jeremy, Fred Feinberg, and Panos Papalambros. "Linking Marketing and Engineering Product Design Decisions via Analytical Target Cascading ." *Journal of Product Innovation Management* 22.1 (2005): 42-62. Web. 11 Jan 2010.

Rowley, Jennifer. "Promotion and marketing communications in the information marketplace." *Library Review* 47.8 (1998): 383-387. Web. 9. Jan 2010.

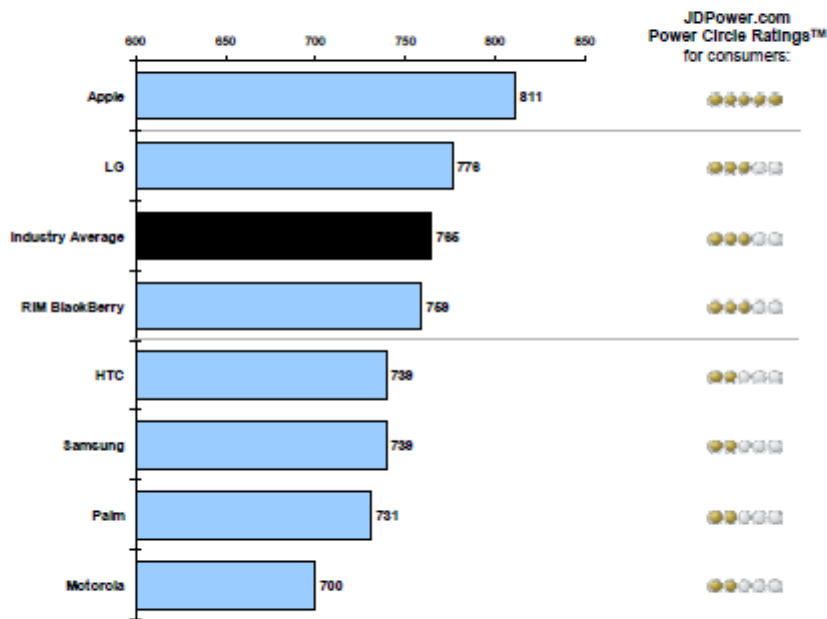
Schoenbackler, Denise, and Geoffrey Gordon. "Multi-channel shopping: understanding what drives channel choice." *Journal of Consumer Marketing*. 19.1 (2002): 42-53. Print.

Schwetje, Gerald, Sam Vaseghi, Janis Stirna, and Anne Persson. *The Practice of Enterprise Modeling*. Springer Verlag, (2008): 145-147. Print.

Appendix:

**J.D. Power and Associates
2009 Wireless Consumer Smartphone
Satisfaction StudySM -Volume 2**

Overall Wireless Consumer Smartphone Index Rankings
(Based on a 1,000-point scale)



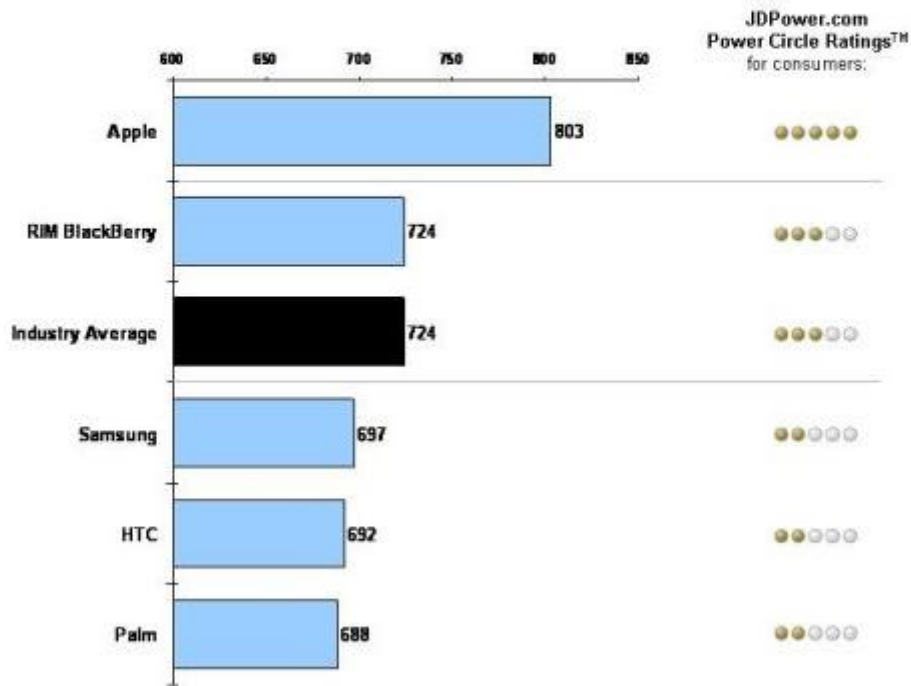
Power Circle Ratings Legend
 ★★★★★ Among the best
 ★★★★☆ Better than most
 ★★★☆☆ About average
 ★★☆☆☆ The rest

Source: J.D. Power and Associates 2009 Wireless Consumer Smartphone Satisfaction StudySM-Volume 2

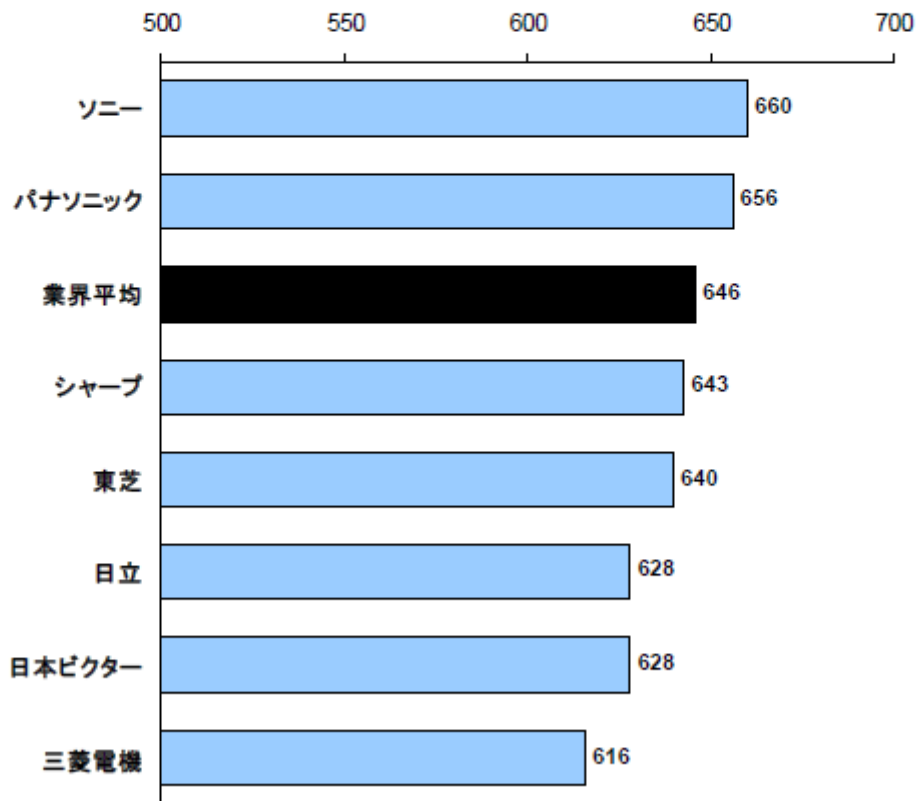
J.D. Power and Associates 2009 Wireless Business Smartphone Customer Satisfaction StudySM

Overall Smartphone Index Rankings

(Based on a 1,000-point scale)

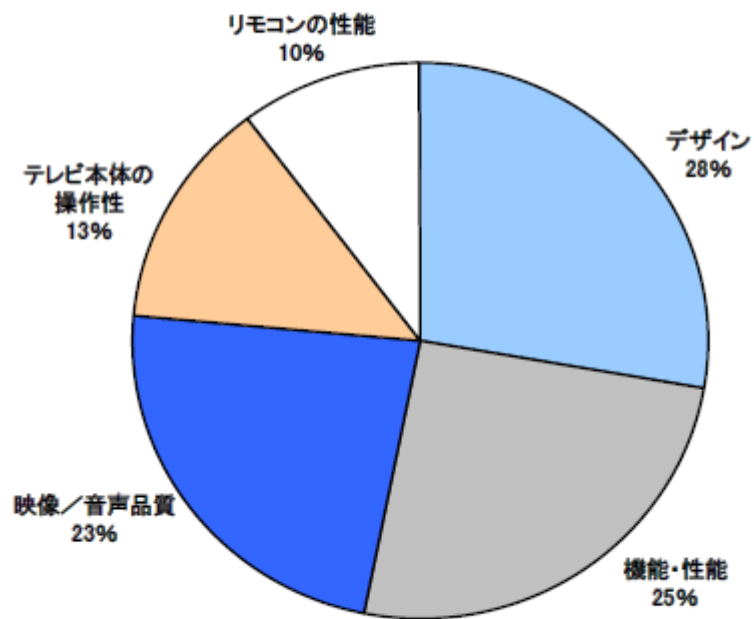


The J. D. Power Asian Pacific
2009 Japanese HDTV Customer Satisfaction Report
The Diagram of Customer Satisfaction



Web. 8 Jan 2010.

The J. D. Power Asian Pacific
2009 Japanese HDTV Customer Satisfaction Report
The Diagram of Customer Satisfaction



. Web. 8 Jan 2010.

我要幫忙 | 信和單下載 | 愛心回覆單下載 | BLOG | CF花絮 | 聯絡我們

愛滿滿 愛心:600
 禮物人用尿布、奶粉
 主贈單位送MP3音樂午安睡枕
 陪伴您親歷休閑片刻,讓愛幸福延續...

愛暖暖 愛心:1200
 尿布、奶粉、霜護樂、抽痰管
 主贈單位送可愛的KamKam龍珠
 或DonDon象象棉柔墊,
 打造樂趣生活,讓愛輕鬆擁有

愛及時 愛心:3600 (可分3期)
 禮物人營養膏食品
 主贈單位送麥特維3M吸濕排汗棉襪系列,
 具備透氣、強力吸溼力的棉襪,
 讓睡眠舒適,讓愛溫暖傳遞

愛分享 愛心:40000 (可分期或多人合捐)
 宜蘭地院愛心牆,
 將製作芳名牌院內留念並致贈感謝狀一只

三合蔥燒餅/香椿燒餅 愛心:100/盒
 燒餅滿料講究製作精細,
 包入品質腳步全台的宜蘭蔥/香椿、
 植物油、五香粉以及少許的鹽調味後,
 在經過反覆揉搓後壓平,
 再撒上芝麻烘培即成。

順德鴨糰/鴨排包 愛心:135/包
 切薄薄片食用或佐以生香苗
 或滾入椰漿汁食用,
 亦可煎炒或微波1至2分鐘,
 下酒配飯兩相宜。

橘之鄉貴妃金橘/蜜李/酸桔 愛心:150/包
 金橘：嚴選宜蘭金橘，
 採低溫真空包裝鎖鮮而成。
 蜜李：「李鹹」和金果同屬於
 宜蘭著名的水果，富含纖維，
 酸桔：入口散發出濃郁的柑桔香味，
 粒粒多汁甜美。

橘之鄉金棗茶+紅李禮盒組 愛心:400/組
 金棗茶：最受推薦的國產飲品，適合熱飲，是老師、教授及
 辦公室上班族們的最佳夥伴。
 鮮採國產金橘，以科學工藝精製成，
 完全不加防腐劑、色素、香料等化學藥劑，
 紅李：宜蘭梅園山區產紅肉李，特選材料，精心製作，
 酸酸甜甜的好滋味，解解冰飲、調酒飲品，
 或製作冰沙品嚐，多享享受！

信用卡授權書

愛心回覆單

線上捐款

ATM/劃撥捐款/支票

ATM轉帳
 臺灣銀行004 帳號：045-004-742-022，
 請將收據貼於回覆單上郵寄
 或傳真 02-2836-1701

郵政劃撥
 戶名：創世基金會 帳號：19204635，
 劃撥後請傳真或寄回收據與愛心回覆單
 (請於匯票標註明「愛愛喝瑪蘭」，
 參與方式及聯絡人資料，以便確認。)

支票
 戶名：創世基金會
 郵寄：111台北市士林區中正路420號5樓
 「愛愛喝瑪蘭」收(附上愛心回覆單)

2009 (C) 創世基金會 All Rights Reserved

<http://www.genesis.org.tw/loveylan/>

我要幫忙 | 信和單下載 | 愛心回覆單下載 | BLOG | CF花絮 | 聯絡我們

廣告CF



線上抽獎抽獎

廣告CF

廣告CF

花絮共賞

桌布下載

2009年09月
 來企女又
 我的第一次

2009年10月
 關於愛
 學歌仔戲

2009年11月
 老鷹抓小雞
 學台語

2009 (C) 創世基金會 All Rights Reserved

Strategic Promotion Quality Function Deployment (PQFD) Interview

Inoue, Akihiro

Marketing management Professor

Keio Business School

External:

- Idea:
 - Idea generation: 2
 - Idea creativeness: 4
- Promotion Planning:
 - Consistency with organization policies: 4
 - Interdepartmental communication: 4
 - Planning efficiency: 4
 - Correctness in represent the marketing operation: 2~4 (3)

Internal:

- Discussion tool:
 - Discussion process: 4
 - Ease of operation: 4
 - Ease to participate: 5

Interactive:

- Promotion data recording: 4
- Impact of PQFD to the data management: 4

Resource management:

- The necessity of prioritize the promotion messages & activities: 4
- The effectiveness of PQFD in resource planning: 4
- The impact of PQFD to resource management: 4

Others:

- If you are the project manager, would you like to implement this model: 3~4 (3.5)
- The value of PQFD in Promotion planning: 4
- The value of PQFD in Resource management: 4
- The value of PQFD in Marketing management: 3~4 (3.5)

Strategic Promotion Quality Function Deployment (PQFD) Interview

Tsai, Chen-long

Senior Marketing Specialist

Genesis Social Welfare Foundation (<http://www.genesis.org.tw/enter.php>)

External:

- Idea:
 - Idea generation: 4
 - Idea creativeness: 3
- Promotion Planning:
 - Consistency with organization policies: 3
 - Interdepartmental communication: 4
 - Planning efficiency: 3
 - Correctness in represent the marketing operation: 3

Internal:

- Discussion tool:
 - Discussion process: 4
 - Ease of operation: 5
 - Ease to participate: 4

Interactive:

- Promotion data recording: 4
- Impact of PQFD to the data management: 4

Resource management:

- The necessity of prioritize the promotion messages & activities: 4
- The effectiveness of PQFD in resource planning: 4
- The impact of PQFD to resource management: 4

Others:

- If you are the project manager, would you like to implement this model: 4
- The value of PQFD in Promotion planning: 3
- The value of PQFD in Resource management: 5
- The value of PQFD in Marketing management: 4

Strategic Promotion Quality Function Deployment (PQFD) Interview

Lang, Chu-Yao

Junior Marketing Specialist

Genesis Social Welfare Foundation (<http://www.genesis.org.tw/enter.php>)

External:

- Idea:
 - Idea generation: 4
 - Idea creativeness: 5
- Promotion Planning:
 - Consistency with organization policies: 4
 - Interdepartmental communication: 4
 - Planning efficiency: 4
 - Correctness in represent the marketing operation: 4

Internal:

- Discussion tool:
 - Discussion process: 3
 - Ease of operation: 3
 - Ease to participate: 4

Interactive:

- Promotion data recording: 3
- Impact of PQFD to the data management: 4

Resource management:

- The necessity of prioritize the promotion messages & activities: 5
- The effectiveness of PQFD in resource planning: 4
- The impact of PQFD to resource management: 5

Others:

- If you are the project manager, would you like to implement this model: 4
- The value of PQFD in Promotion planning: 4
- The value of PQFD in Resource management: 5
- The value of PQFD in Marketing management: 4

Strategic Promotion Quality Function Deployment (PQFD) Interview

Huang, Wei-Shan

Junior Marketing specialist

Order System Furniture (<http://www.order.com.tw/html/index.asp>)

External:

- Idea:
 - Idea generation: 5
 - Idea creativeness: 5
- Promotion Planning:
 - Consistency with organization policies: 4
 - Interdepartmental communication: 4
 - Planning efficiency: 5
 - Correctness in represent the marketing operation: 3

Internal:

- Discussion tool:
 - Discussion process: 5
 - Ease of operation: 4
 - Ease to participate: 4

Interactive:

- Promotion data recording: 4
- Impact of PQFD to the data management: 4

Resource management:

- The necessity of prioritize the promotion messages & activities: 4
- The effectiveness of PQFD in resource planning: 4
- The impact of PQFD to resource management: 5

Others:

- If you are the project manager, would you like to implement this model: 5
- The value of PQFD in Promotion planning: 4
- The value of PQFD in Resource management: 4
- The value of PQFD in Marketing management: 4

Strategic Promotion Quality Function Deployment (PQFD) Interview

N, Masaki

Washington State Licensed Accountant

S&P 500 company

External:

- Idea:
 - Idea generation: 4
 - Idea creativeness: 3
- Promotion Planning:
 - Consistency with organization policies: 4
 - Interdepartmental communication: 5
 - Planning efficiency: 4
 - Correctness in represent the marketing operation: 3

Internal:

- Discussion tool:
 - Discussion process: 5
 - Ease of operation: 4
 - Ease to participate: 4

Interactive:

- Promotion data recording: 3
- Impact of PQFD to the data management: 3

Resource management:

- The necessity of prioritize the promotion messages & activities: 4
- The effectiveness of PQFD in resource planning: 4
- The impact of PQFD to resource management: 5

Others:

- If you are the project manager, would you like to implement this model: 4
- The value of PQFD in Promotion planning: 4
- The value of PQFD in Resource management: 5
- The value of PQFD in Marketing management: 4

Strategic Promotion Quality Function Deployment (PQFD) Interview

Tomaru san

Fuji Xerox

External:

- Idea:
 - Idea generation: 5
 - Idea creativeness: 5
- Promotion Planning:
 - Consistency with organization policies: 5
 - Interdepartmental communication: 5
 - Planning efficiency: 4
 - Correctness in represent the marketing operation: 4

Internal:

- Discussion tool:
 - Discussion process: 5
 - Ease of operation: 5
 - Ease to participate: 5

Interactive:

- Promotion data recording: 5
- Impact of PQFD to the data management: 4

Resource management:

- The necessity of prioritize the promotion messages & activities: 5
- The effectiveness of PQFD in resource planning: 5
- The impact of PQFD to resource management: 5

Others:

- If you are the project manager, would you like to implement this model: 5
- The value of PQFD in Promotion planning: 4
- The value of PQFD in Resource management: 4
- The value of PQFD in Marketing management: 5