FINDING CUSTOMER DELIGHTS USING QFD

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SUMMARY

Changes in market demographics and the regulatory environment are creating many new opportunities for health-care and related organizations. As the oldest and most respected health insurance organization in the State of Florida, Blue Cross Blue Shield of Florida (BCBSF) strives to stay ahead of the competition by quickly responding to these changes with new and improved insurance and health maintenance products. Recently, we have begun to use QFD to discover the unspoken customer needs for an underserved portion of our population. QFD has allowed us to convert their needs into new products, services, and features to delight and attract new customers as well as retain current customers. This paper will describe some of the new opportunities we are facing, and show step by step how we are addressing them by understanding the Voice of the Customer and innovating and implementing exciting solutions.

INTRODUCTION

What is Quality Function Deployment? Basically, QFD is designed to improve customer satisfaction and value with the quality of our products and services. Service sector applications are becoming increasingly important as pointed out in a recent quote by Michael Bennett, director of customer affairs at Verizon Wireless on changes in the mobile telephone industry. "All the carriers will have cool cell phones and technology. It's the consumer-friendly services that can be the differentiator. Competition will occur in this area." What can QFD do that is not already being done by traditional quality systems? To understand QFD, it is helpful to contrast the differences between modern and traditional quality systems.

TRADITIONAL QUALITY SYSTEMS

Traditional approaches to assuring quality often focus on work standards (Love 1986), automation to eliminate human error-prone processes, and in more enlightened organizations, Quality Improvement Teams to empower employees to resolve problems. As organizations are finding out, however, consistency and absence of problems are not enough of a competitive advantage after the market shakes out suboptimal players. For example, in the automobile industry, despite the celebrated narrowing of the "quality" (read that fit and finish) gap between U.S. and Japanese makers, Japanese cars still win the top honors in the J.D. Powers Survey of New Car Quality. Suboptimal makers have all but disappeared from the North American market, the fit and finish of today's North American built vehicles are better than ever, but still the Japanese makes of Toyota, Nissan, and Honda grab top honors. There must be something more.

MODERN QUALITY SYSTEMS

QFD differs from traditional quality systems which aim at minimizing negative quality (such as poor service, broken product). With traditional systems, the best you can get is *nothing wrong* - which is no longer good enough. In addition to eliminating negative quality, we must also maximize positive quality end-to-end throughout the organization. This creates **value** which leads to customer satisfaction.

> ## *Nothing Wrong ≠ Anything Right*

Quality Function Deployment is the only comprehensive quality system aimed specifically at satisfying the customer. It concentrates on maximizing customer satisfaction (positive quality) by seeking out both spoken and unspoken needs,

translating these into actions and designs, and communicating these throughout the organization end-to-end (**Figure 1**). Further, QFD allows customers to prioritize their requirements, benchmark us against our competitors, and then direct us to optimize those aspects of our product, process, and organization that will bring the greatest competitive advantage. What business can afford to waste limited financial, time and human resources on things customers don't want?
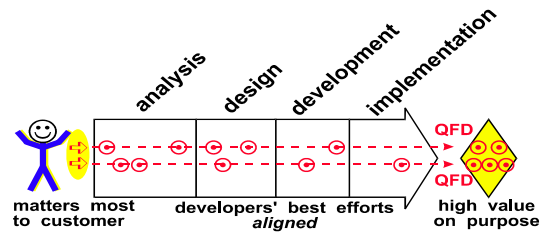

Figure 1. QFD delivers value end-to-end.

VOICE OF CUSTOMER

In its earliest uses in the 1960s, QFD concerned itself primarily with end-to-end alignment of requirements throughout the organization. As internal business processes improved, QFD began to look upstream at where the requirements came from and where improvements could be made. As a result, QFD invited the marketing and sales efforts, traditionally the most customer oriented, to join. In the ensuing years, QFD has devised numerous tools to bring this fuzzy front end into clearer focus. The QFD process should reflect the business needs of the organization. No two QFDs are alike. What follows is the process Blue Cross Blue Shield of Florida uses.

0. Custom tailoring your QFD process.
1. Customer Verbatims, Observations, Analysis
2. Customer Voice Table
3. Affinity Diagram
4. Hierarchy Diagram
5. Analytic Hierarchy Process
6. Maximum Value Table
7. Idea Generation and Analysis

0. CUSTOM TAILORING YOUR QFD PROCESS

Dr. Akao never intended QFD to be a rigid boilerplate of required QFD tools and methods. Virtually every case published in Japan begins with an explanation of the business problem the company faced and how they improved their development process using QFD. When QFD came to the US however, the need for the automotive industry to quickly adopt it resulted in an oversimplification (dubbed kindergarten QFD by its American creators) that could be taught easily. This was based on a re-purposing of a four step reliability deployment study done at Fuji Xerox, and resulted in the often cited 4-Phase QFD model.

While easy to understand, it fit only businesses doing model upgrades of manufactured build-to-print components and parts. Companies in assembly, materials processing, consumer products, service, or software industries and companies that did system level design that attempted to adapt their development process to fit this 4-Phase model often ended up frustrated. Further, as US companies moved towards Lean Six Sigma and right-sized their development activities, the resources to do QFD were often unable to complete what they thought was the *required* set of charts.

Dr. Akao, concerned that QFD was being abandoned by companies in the US and elsewhere in the West, tasked the QFD Institute to modernize the QFD process for these companies, including tailoring the process, making the process faster and sustainable, developing training programs, and incorporating other improvements that he had been directing in Japan for some time. The result is the QFD Institute Belt program, in which the authors are directly involved.

The first step is to custom-tailor the QFD process to meet the needs of the organization. This is done by a QFD Master Black Belt® or QFD Red Belt® (highest level). It begins with in-depth interviews with key process owners and managers to understand the key objectives of the organization and what prevents them from being realized. Then, the QFD tools, methods, and process are tailored to address the most pressing issues.

The custom tailoring began in April 2005 at BCBSF headquarters in Jacksonville Florida. Interviews included these functions: Vice President of Corporate Marketing, Vice President of Corporate Sales, Vice President of Product Development and Management, Vice President of Integrated Business Intelligence, Sr. Director of Marketing Analytics, Director of Local Group Market Management, a Sales Director, Director of Information Management, IT Integrator of Enterprise Program Management & Integration, a member from Advertising and Marketing, and a member from Member Services. From these interviews, several business objectives emerged including

1. Strengthening the Enterprise's Business Intelligence (BI) Capability

2. Bettering our understanding of the present and future industry, customer and competitive landscape
3. Providing key executives and other managers with actionable information for improved decision making
4. Implementing the "BI Community" design

Based on these objectives, the QFD process was tailored to include the steps indicated below (**Figure 2**). The steps and excerpts from the project will be presented.
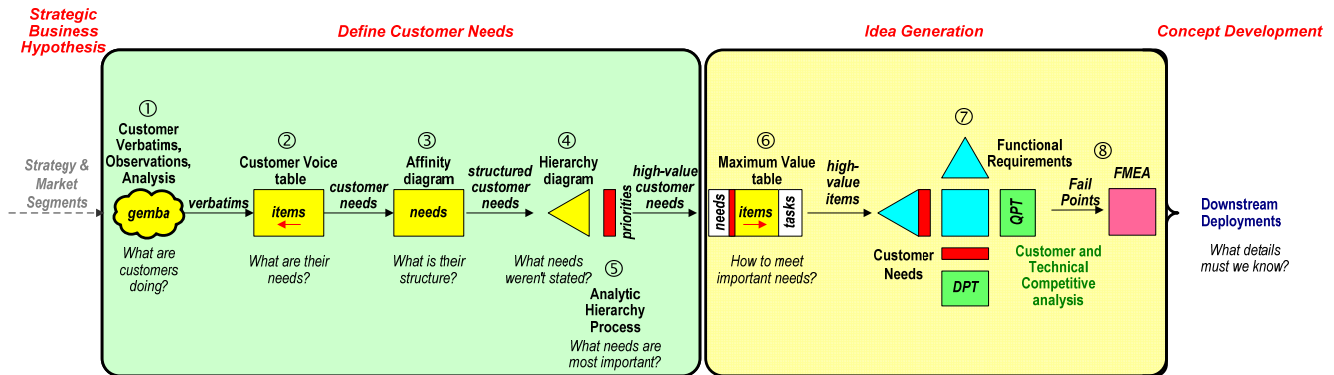

Figure 2. BCBSF custom tailored QFD process.

Next, the QFD team was assembled and given the three day QFD Green Belt® training divided into two modules with a field work hiatus in between. Team members who completed the program were the Product Manager, the Manager of Corporate Sponsorships and Promotions, the Manager Group Analytics, the Agent Coordinator – Sales, a Sr. Account Consultant, the Manager Marketing Analytics, the OE Analyst M&B, and a Market Manager. The training was conducted by Glenn Mazur.

1.   CUSTOMER VERBATIMS, OBSERVATIONS, ANALYSIS

BCBSF develops their Strategic Business Hypothesis and corresponding market segmentation and then uses QFD to define customer needs, generate ideas for new programs, and then develop winning concepts in to realizable plans. Our project was to create a differentiating experience for our customers. Our market research activities combine two methods: Copernicus – to define business segments such as small businesses with a "white collar focus" and "hassle free" and PATH – to define heath care user segments such as "independently healthy" and "family centered." With regards to these business and user segments, the Strategic Business Hypothesis was to spread the success we have enjoyed in our major markets to others where we are not the preferred health care insurance provider, such as small businesses under 300 employees.

An analysis of observing customers can clarify unspoken opportunities for new products and services. For manufactured products and many kinds of services, observing customers as they use the product or service can help us understand unspoken needs. In QFD, we call this going to the *gemba* (crime scene). Since health care insurance is not always an activity we can predict when or where to visit customers, much of our initial data was based on input from customer service representatives, employer group administrators, insurance broker representatives, and patients.

After introducing ourselves, we asked the customer to walk us through a typical business experience. The Customer Process Model (**Figure 3**) was used stimulate the customer to discuss her problems and opportunities when purchasing or using heath care insurance. If customers do not like to portray themselves as having problems, encourage them to "brag" of their accomplishments and "invite" them to join you
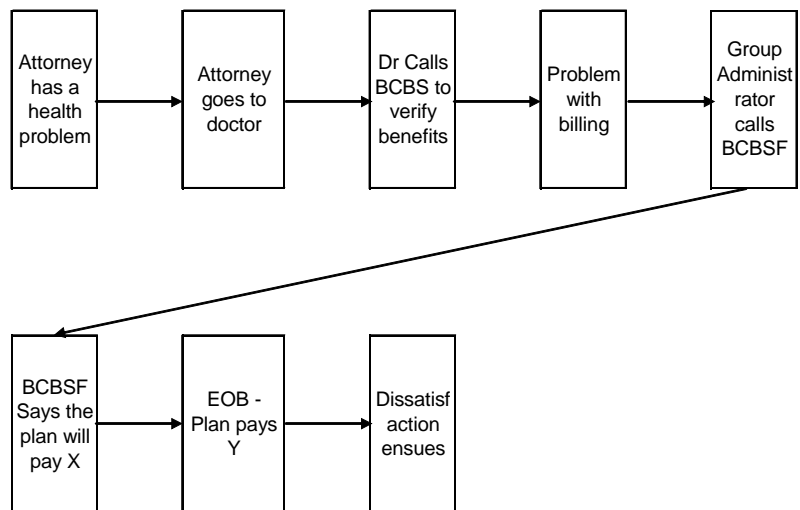

Figure 3. Customer Process Model

in the concept phase. Encourage the customer to tell more by saying, "You seem concerned about…" or "You seem to dis-agree." The Customer Process Model makes concrete the issues the customer faces in performing their job and in servicing their customers, in the case here, her employee or health care user.

2. SORT AND TRANSLATE VERBATIMS INTO CUSTOMER NEEDS

Dr. Noriaki Kano, a Japanese quality expert, conducted a study of customer satisfaction, using a paired question-naire: positive question (or not) and inverse question. He demonstrated that to satisfy customers, we must understand how meeting their requirements affects satisfaction. There are three types of customer requirements to consider (**Figure 4**).

Expected Requirements are often so basic the customer may fail to mention them - until we fail to perform them. They are basic expectations without which the product or service may cease to be of value; their absence is very dissatisfying. Further, meeting these requirements often goes unnoticed by most customers. For example, if coffee is served hot, customers barely notice it. If it's cold or too hot, dissatisfaction occurs. Expected requirements must be fulfilled, but fulfilling them beyond what is expected does not increase satisfaction.

Normal Requirements are typically what we get by just asking customers what they want. These requirements sat-isfy (or dissatisfy) in proportion to their presence (or absence) in the product or service. Fast delivery would be a good exam-ple. The faster (or slower) the delivery, the more they like (or dislike) it.

Exciting Requirements create the differentiation experience. They are beyond the customer's expectations. Their ab-sence doesn't dissatisfy; their presence excites. For example, if caviar and champagne were served on a flight from Jackson-ville to Miami, that would be exciting. If not, customers would hardly complain. These are the things that wow the customers and bring them back. Since customers are not apt to voice these requirements, it is the responsibil-ity of the organization to explore customer problems and opportunities to uncover such unspoken items. These requirements can shift over time, segment, or other external factors.

What are "requirements"? We have many ex-cellent specification approaches. And if you have cus-tomers who are (1) completely *knowledgeable* about all their requirements, and (2) able to *articulate* them, they work great. But what if we have normal customers? Your customers are untrained at requirements giving. They have no tools or techniques to fully explore their *requirements space*. They are average at articulating what requirements they are aware of. You will not get a complete set of requirements from any customer, ever. Further, even if they could, you don't have the time or resources to do all their requirements any way, do you?

Adapted from Kano, Noriaki et al. 1984. "Attractive Quality and Must-be Quality" *Hinshitsu*, Vol. 14, No. 2. JUSE.

Figure 4. Kano's Model of customer satisfaction

Fortunately, you don't have to completely fulfill all the customer's requirements to satisfy the customer. But to un-derstand why this is the case, we must understand: (1) the relative effect of doing certain types of requirements on customer satisfaction; (2) the relative importance of the customer's requirements, and (3) what 'requirements' are—and how they are different from 'needs' and 'features.' In QFD we take a *very* different approach to exploring and then engineering require-ments. We ask customers to define "value" by telling us or demonstrating important problems they face that prevent them from achieving their personal or business goals, by identifying opportunities they cannot currently seize, and by revealing things that make them look good to others or feel good about themselves. These become the starting point for further analysis.

- Problems (negative statements of what is wrong or what needs to be changed) can be reworded into positive needs or benefits (what to change to).
- Opportunities and image issues which are usually already positively stated, can be reworded into needs or bene-fits.
- Remember, customer problems are not the same as complaints or problems with your product. Customer oppor-tunities are not the same as your product features or solutions. Regardless of how the customer expresses him-self, his words or behavior must be analyzed for greater breadth and depth of meaning.
- Don't stop with customer verbatims – they can express the same to your competitors. Advantage belongs to those who make the effort to go beyond the obvious. You must learn both what the customers are saying and
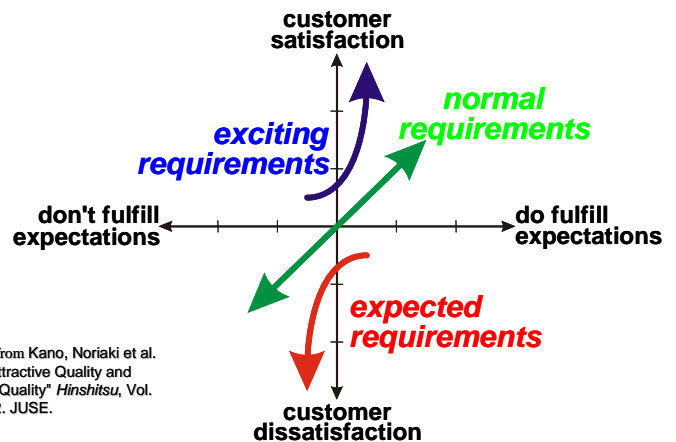
why they are saying it. Even if the customer is wrong, it is your responsibility to find out what they really need. *Caveat emptor* has become *caveat vendor*.

- We define customer needs as the positive restatement of customer problems, opportunities, or image issues independent of the product or solution. All other requirements, features, specifications, and technical issues are sorted and translated in the Customer Voice table.

The Customer Voice table (**Figure 5**) is a way for the QFD team to sort the verbatims into categories that are meaningful to the team. The data may be both spoken and observed data learned from the Customer Segments Table, the Customer Process Table, or other analyses done so far. Other sources of data can be complaint reports, complaints, sales reports, etc. relevant to this customer. Each data item should be singular; complex statements should be decomposed into individual elements as this will make later interpretations easier to organize and prioritize. The purpose of this table is to first properly sort the data and then to translate any product feature data into detailed customer benefits and needs. Data should first be placed in the appropriate column and then translated into customer needs, as indicated by the arrows in Figure 5. Categories relate to the customer, solutions, design, project, and even organizational issues. **Table 1** shows a portion of the Customer Voice table created for this project.
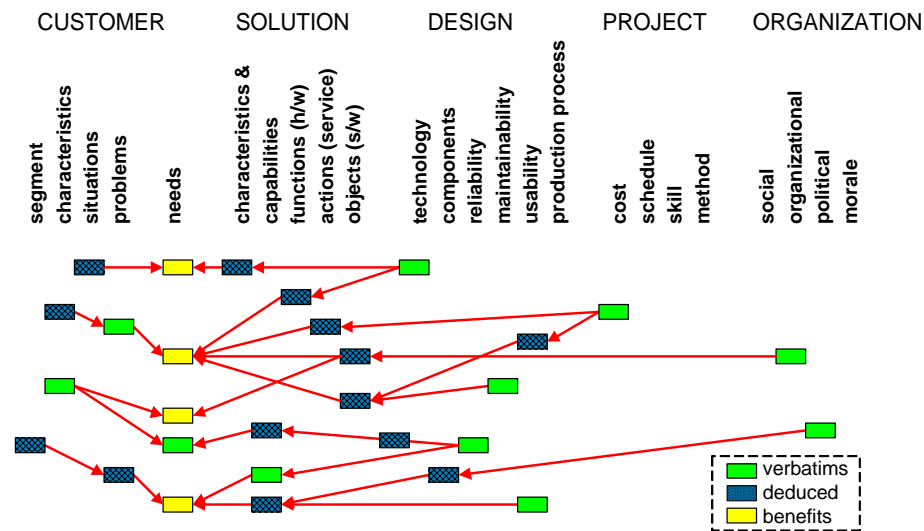

Figure 5. Customer Voice Table (concept)

Table 1. Customer Voice Table (project)

problems	customer needs	characteristics & capabilities	functions	reliability	technology	information	commun-ications
"Attract and retain key employees"	I can hire best new college graduates						
	I can attract best employees from competitors						
	My employees know exactly what they are entitled to		Publish coverage	Employees feel cheated			"Health plans are easy to understand"

In Table 1, the customer, states he wants "Health plans are easy to understand" Since this describes how the health care is communicated, it is considered part of the solution, and must be translated back to underlying needs. These include "I can hire the best new college graduates," "I can attract best employees from competitors," "My employees know exactly what they are entitled to," etc.

3. CUSTOMER NEEDS STRUCTURE

The Affinity diagram shows us the natural structure of the customers' requirements. The Affinity diagram is produced by the KJ Method™. This is a non-rational "right brain" method, as most people are not aware of what cognitive structure they use for their requirements. It was developed by cultural anthropologist Dr. Jiro Kawakita to surface cognitive structure—to make visible the way the people who do it think about the items operated on. This method is also unique because the grouping categories come after the groups are made, not before. This allows for breaking the paradigms that existing categories place on data. Whose cognitive structure do you want to explore? They should create the Affinity diagram. Here we want to understand how customers think about their needs. **Figure 6** shows these groupings.

Employee Satisfaction
which includes these statements:

"My Employees appreciate the benefits I provide for them"
"Keep my Employees and their Families Healthy"
"My Employees know what they are entitled to"
"My Employees have Peace of Mind"

Business Efficiency
which includes these statements:

"Attract Highly-Qualified New Employees"
"Save me Time and Effort"
"Retain My Best Employees"
"My Boss Knows I'm Diligent with the Company's Money"
"Keep my Employees Productive"

Health Care Knowledge
which includes these statements:

"I Feel Good about the Plan I Choose"
"My costs are predictable year over year"
"I Understand how all the Plans Work"
"I Want My Employees to Understand the Value of the Health Coverage I'm Providing for Them"

Relationship with the Carrier
which includes these statements:

"The Carrier Acts as My Partner"
"I Feel Valued by the Carrier"
"I Know I'm Getting the Right Answer when I'm Talking to Customer Service"

Figure 6. Affinity Diagram

4. LOOK FOR MISSING, UNVOICED, OR LATENT NEEDS

A Hierarchy diagram (omitted) is used to perform three tasks: (1) correct the levels of detail, (2) find missing data, and (3) prevent common errors in subsequent steps such as the House of Quality. The Hierarchy diagram of customer needs is the basis for analysis to uncover the latent needs that are implied by the needs we have so far. It is similar to the Affinity diagram and is omitted from this paper.

5. CUSTOMERS PRIORITIZE THEIR NEEDS

The customer needs on the hierarchy diagram must be prioritized by actual customers so we know which needs are how important, and to whom. The Analytic Hierarchy Process (**Table 2**) is an elegant procedure which provides accurate ratio-scale priorities based on natural language comparisons. (There are other ways to do this, but they are not as accurate, nor do they yield ratio-scale numbers.) Unlike other mathematical models, such as the multi-

Table 2. Customers use AHP to prioritize their needs (methodology)

Improve business efficiency	I can hire best new college graduates	I can attract best employees from competitors	I can keep star employees from leaving	normalized columns			sum	avg
I can hire best new college graduates	1	3	5	0.652	0.714	0.455	1.821	0.607
I can attract best employees from competitors	1/3	1	5	0.217	0.238	0.455	0.910	0.303
I can keep star employees from leaving	1/5	1/5	1	0.130	0.048	0.091	0.269	0.090
	1.533	4.200	11.000	1.000	1.000	1.000	3.000	1.000

attribute theory, AHP does not require rational responses. An inconsistency check quantifies this by looking for instances of a>b, b>c, c>a, etc. A properly organized and prioritized hierarchy can tell us if we have sufficient needs to satisfy the customers. In other words, do we have enough needs that the customer would be satisfied with the product, if we delivered them? We may also ask customers how they measure their degree of satisfaction. **Table 3.** shows the results for the highest or primary level of the hierarchy from various segments. **Figure 7.** represents a portion of the questionnaire give to determine the relative importance of secondary level needs for the most important primary level need, "Employee Satisfaction." This survey format is another way to show the paired comparisons shown in the matrix in Table 2. Surveys of the secondary level needs were created for "Employee Satisfaction" and "Business Efficiency" which together accounted for 71% of the importance at the primary level. The secondary level needs for "Healthcare Knowledge" and "Relationship with Carrier" were ignored since collectively they accounted for only 29% of the importance. The purpose of QFD is create solutions for the highest priority customer needs and they were most likely to be found within the first two primary level needs. **Table 4.** shows the results of the secondary level survey. The top three are highlighted, with "Keep my employees and their families healthy"

earning 18%. The number two customer need of "My employees appreciate the benefits I provide for them" which earned 13% will be detailed here.

Table 3. Customers use AHP to prioritize their needs (primary level needs, by segment)

Goal - Employer Satisfaction

Segment	Relationship	Cell Size	Respondents	Response Rate	Employee Satisfaction	Business Efficiency	Healthcare Knowledge	Relationship w/ Carrier
White Collar	BCBS	1500	210	14%	48%	25%	15%	12%
White Collar	Non BCBS	1500	70	5%	45%	27%	16%	12%
Hassle Free	BCBS	1500	197	13%	46%	25%	17%	12%
Hassle Free	Non BCBS	1500	57	4%	40%	28%	18%	14%
No Frills	BCBS	1500	182	12%	44%	26%	18%	13%
No Frills	Non BCBS	1500	41	3%	38%	35%	15%	12%
Overall	Both	9000	757	8%	45%	26%	17%	12%

Figure 7. Survey format for AHP paired comparisons (secondary level items of "Employee Satisfaction"

Table 4. Prioritization of Primary and Secondary Level Needs (from AHP)

Employee Satisfaction	45%	My Employees appreciate the benefits I provide for them	13%
		Keep my Employees and their Families Healthy	18%
		My Employees know what they are entitled to	5%
		My Employees have Peace of Mind	9%
Business Efficiency	26%	Attract Highly-Qualified New Employees	9%
		Save me Time and Effort	5%
		Retain My Best Employees	11%
		My Boss Knows I'm Diligent with the Company's Money	4%
		Keep my Employees Productive	7%
Relationship with the Carrier	17%	The Carrier Acts as My Partner	
		I Feel Valued by the Carrier	
		I Know I'm Getting the Right Answer when I'm Talking to Customer Service	
Health Care Knowledge	12%	I Feel Good about the Plan I Choose	
		My costs are predictable year over year	
		I Understand how all the Plans Work	
		I Want My Employees to Understand the Value of the Health Coverage I'm Providing for Them	

6. TRANSLATE CUSTOMER NEEDS INTO FUNCTIONAL REQUIREMENTS AND SOLUTIONS

In the Customer Voice Table, all columns were driven back to explore customer needs. Here we use the Maximum Value Table (**Table 5**) where key customer needs are driven forward to the various dimensions of design that must be aligned end-to-end in order to assure customer value. The MVT does not of itself kick-off the whole project, but illustrates where we need to do our best in the design and delivery of the product. At this point it is permissible to "over explore" as we can cut back later depending on time, availability of resources, and budget. The columns start with the same set used in the CVT, but new columns may be added to assure end-to-end activity to deliver value to the customer. This is the coherent design process discussed earlier in the course. The MVT may show us areas that have greater complexity or uncertainty,
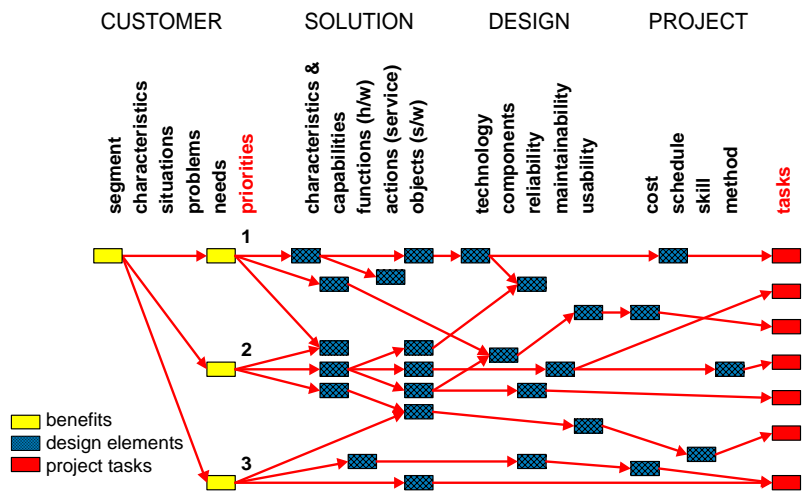

Figure 8. Maximum Value Table (concept)

and where matrices need to be done between two design dimensions and at what level of detail. The outputs are specific tasks and staff actions. **Table 5.** shows the Maximum Value table for "My Employees Appreciate the Benefits I Provide to Them," indicating critical technical requirements that must be addressed by the contracting and operations departments here at BCBSF in order for this differentiating experience to be realized. Generating design solutions showed that there were interactions that must be understood for the solutions to be enabled correctly. A Relations diagram **(Figure 9)** was created to explore these interactions and identify key drivers to a successful product. We quickly recognized that contributions and collaboration among the functional areas of BCBSF were essential to enabling the solutions. Given the timetable of this program and the amount of work required and availability of the functional areas, we used AHP to prioritize the concepts in terms of feasibility of implementation. **Table 6.** shows the results.

Table 5. Maximum Value Table for "My Employees Appreciate the Benefits I Provide to Them"

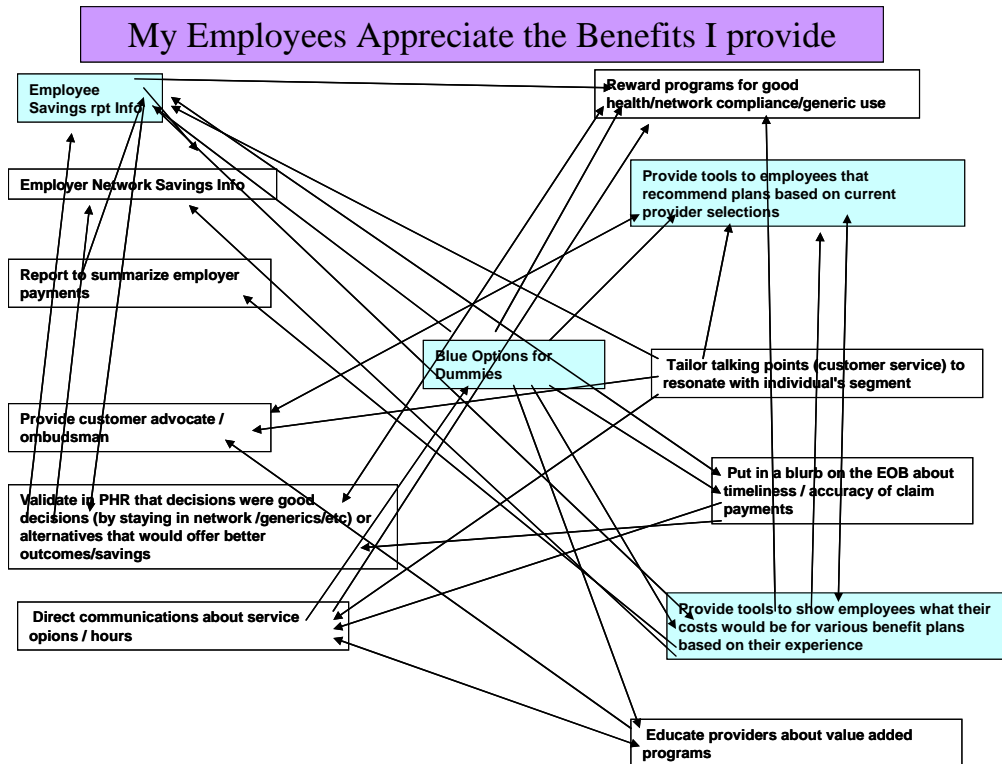| Customer Need	Solution						Design
	Contract		Broker/Rep	**Operations**		Feedback	
	Benefits	Provider Network		Member Service	Claims		
My employees appreciate the benefits I provide to them.	Show savings to employee of using insurance	Explain to employees how Blue Card and BCBSF provider network is superior	Explain how benefits mechanism works			Assure benefits are working as promised and useful.	Employee Savings rpt Info
	Explain richness of benefits offered through BCBSF	Employee does not have to change "critical" MD (ped, OBGYN) to conform to plan	Explain to employees industry averages if employer is above average			Employees know they have a conduit for feedback.	Provide customer advocate / ombudsman
	Show employees how much the employer paid for their benefits		Explain network savings				Network Savings rpt Info
							Report to summaryize employer payments
							Validate in PHR that decisions were good decisions (by staying in network /generics/etc) or alternatives that would offer better outcomes/savings
							Provide tools to employees that recommend plans based on current provider selections
							Provide tools to show employees what their costs would be for various benefit plans based on their experience

Figure 9. Relations Diagram shows key drivers and interactions of product concept

Table 6. Concept Prioritization Based on Implementation Feasibilty

Concept	Department Ease of Implementation (higher = easier)	Delivery System 11.8%	Operations 16.6%	Legal 2.2%	Sales / Agents 8.5%	IM / IT 4.2%	Vendors 38.7%	Marketing / Product 18.0%	Total Score
10	Real Information About Physicians	Hi	Low	Hi	Med	Hi	Low	Med	0.136
4	Pay As You Go	Low	Med	Hi	Hi	Hi	Low	Hi	0.119
8	Rebates for Healthy Behaviors	Hi	Med	Hi	Hi	Hi	Low	Med	0.108
1	Business / Benefits Seminar	Low	Low	Med	Med	Low	Med	Hi	0.106
5	Outreach Health Coaching	Hi	Med	Low	Med	Low	Hi	Low	0.103
3	Healthcare / Financial Consultant	Hi	Med	Hi	Hi	Low	Low	Hi	0.102
11	Blue Options for Dummies	Med	Med	Hi	Med	Low	Med	Med	0.078
9	In-Company Health Fairs	Med	Low	Low	Med	Low	Hi	Hi	0.077
2	Vendor Discount Programs	Low	Med	Hi	Med	Med	Hi	Med	0.076
7	Physician / Hospital Cost Info	Hi	Med	Hi	Hi	Hi	Med	Med	0.059
6	Personal Health Report	Med	Med	Hi	Hi	Hi	Hi	Hi	0.037

Details of the top concept "Business/Benefits Seminar" include:

- Blue Cross Provides free seminars for Business Owners and Group Administrators on current topics such as:
  - Making Good Healthcare Decisions for your Company
  - Understanding Consumer Driven Health Plans
  - Flexible Spending Account
  - Medicare Part D
  - Corporate Wellness Programs
- Available to Blue Cross Companies and to non-Blue Cross Companies
- Bring in Subject Matter Experts to speak
- Seminars Last One Day and are an Annual Event
- Seminars are held in 5-6 Florida cities

Details of the "Vendors Discounts Program" concept include:

- Blue Cross uses its buying power to pass along many corporate discounts to you and to your employees
- Web-Based, Hassle-Free application makes it easy to find good deals on:
  - Smoking Cessation and Weight Loss Programs
  - Dell Computers and other Office Equipment
  - Cell Phones
  - Rental Cars / GM Car Purchase Discount
  - Hotels
  - Computer Software Training (QuickBooks, Windows applications)
  - Office Furniture

Details of the "Blue Options for Dummies" Booklet concept include:

- Blue Cross wants its members to understand their healthcare benefits
- An annual Step-By-Step, Easy-To-Understand Guide to selecting the best health care plan for your company
- Helps you to understand the differences between products, such as HMOs, PPOs, Consumer-Driven Health Plans
- Includes Flexible Spending Accounts (FSA), Health Spending Accounts (HSA)
- Helps you select the most efficient plan in regard to Premium, Deductible, Co-Insurance, Co-Pay, Out-of-Pocket Maximum, Hospital Co-Pay, etc.
- Sales Force and Customer Service reps offer personal assistance in helping you select the best plan for your company

Details of the "Pay as You Go" concept include:

- It's the same insurance – Just a different way of paying for it.
- You Pay a Much Smaller Premium
- Your company pays Blue Cross for medical services (at Blue Cross's discounted rate) when they are received by your employees.
    - Ex. An employee has a doctor visit that costs $100. The employee pays a $20 co-pay. Your office is billed $80 (the balance of the doctor charge) + $15 for administrative cost. The bill is sent monthly. The bill is HIPAA-compliant.
- There is an Out-Of-Pocket (OOP) Maximum that is in place for the employer, so unexpected Medical Bills do not bankrupt a business.
- Assume the employer's OOP Maximum is similar to the employer's annual premium amount.
- Employees have Deductibles and Co-Pays
- Your Premium pays for Catastrophic Insurance that pays for any extremely high claims such as premature births, heart surgery, strokes, cancer treatments, etc.
- Monthly Bills can be "averaged" to even out high expenditure months

These and the other concepts are now being tested in focus groups with small business owners around the State of Florida. We want to proceed quickly so we are limiting the scope of the focus groups to 5-10 groups in the Miami and Tampa areas. We will select these based on percentage of participation, survey of Business Decision Makers, and employees renewal rate by selecting groups with an October 1 renewal date.

CONCLUSION

As shown here, QFD can be used to identify the most important needs of the most important customers and translate them into specific design concepts and actionable staff responses. The tools can be easily taught for future projects by our QFD Black Belt® and do not require anything more sophisticated than sticky notes and a four-function (+ - x /) calculator. We next intend to apply these tools and methods to additional products for different markets, and different levels of customers including physicians, healthcare consumers, and others.

Our long term QFD goal is to train and sustain an ongoing body of internal QFD practitioners. We believe the QFD Institute Belt program offers the most flexibility and sophistication to do that. Their curriculum includes:

- **QFD Gold Belt**® with executives to decide to do QFD and review goals.
- Technical diagnosis of your development process to tailor QFD to your projects.
- Introductory tools training: **QFD Green Belt**® on your tailored process.
- Training and facilitation: **QFD Black Belt**® (during-the-project facilitation and training of facilitators).
- QFD Specialist: **QFD Master Black Belt**® who will be responsible for future tailoring of your QFD process for different product types.

Details can be found at www.qfdi.org.

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REFERENCES

Granelli, James S. 2005. "Wireless carriers polish manners." *The Detroit News.* December 19, 2005. p 2C.

Kano, Noriaki, Seraku, Takahashi, and Tsuji. 1984. "Attractive Quality and Must-be Quality." *Hinshitsu*, Vol. 14, No. 2 (1984).

Saaty, Thomas L. 1994. *Fundamentals of Decision Making and Priority Theory with the Analytic Hierarchy Process.* Pittsburgh, PA: RWS Publications. ISBN 0-9620317-6-3.