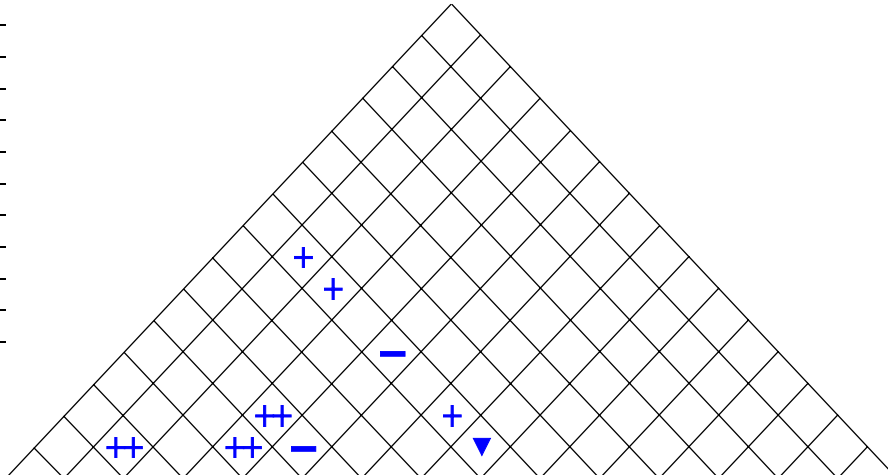|	
Title:	Chocolate Chip Cookies - Customer Req's vs Functional Req's
Author:	John Doe
Date:	5/15/2008
Notes:	The quality characterisitic "Weight" in column #4 may not be a valuable requirement. Its "Max Relationship Value in Column" is only a 1.

Legend

Symbol	Meaning	Value
Θ	Strong Relationship	9
O	Moderate Relationship	3
▲	Weak Relationship	1
⧺	Strong Positive Correlation	
+	Positive Correlation	
—	Negative Correlation	
▼	Strong Negative Correlation	
▼	Objective Is To Minimize	
▲	Objective Is To Maximize	
X	Objective Is To Hit Target	

Competitive Analysis (0=Worst, 5=Best)

- Our Company
- Mrs. Fields
- Girl Scouts
- Starbuck's
- Cinnabon
- Kebler

Column #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Direction of Improvement: Minimize (▼), Maximize (▲), or Target (x)	X	X	X	▲	▲	▲	▲	▼	▲						

Quality Characteristics (a.k.a. "Functional Requirements" or "Hows")

Column headers: Color / Tensile Yield Strength / Tensile Ultimate Strength / Weight / Size (diameter) / Thickness / Avg. Hedonic Scale Rating / Cost per Cookie / Density of Chocolate Chips

Row #	Max Relationship Value in Row	Relative Weight	Weight / Importance	Demanded Quality (a.k.a. "Customer Requirements" or "Whats")	Color	Tensile Yield Strength	Tensile Ultimate Strength	Weight	Size (diameter)	Thickness	Avg. Hedonic Scale Rating	Cost per Cookie	Density of Chocolate Chips			Our Company	Mrs. Fields	Girl Scouts	Starbuck's	Cinnabon	Kebler
1	9	6.7	5.0	Good Texture		Θ	Θ									2	5	2	3	5	0
2	9	13.3	10.0	Generous Portions				▲	Θ	O						5	4	3	4	4	1
3	9	33.3	25.0	Tastes Good							Θ					3	5	4	3	4	2
4	9	26.7	20.0	Low Price								Θ				5	1	1	0	2	5
5	9	20.0	15.0	Appetizing Appearance	Θ								O			2	5	2	4	3	2
6																					
7																					
8																					
9																					
10																					

	Color	Tensile Yield Strength	Tensile Ultimate Strength	Weight	Size (diameter)	Thickness	Avg. Hedonic Scale Rating	Cost per Cookie	Density of Chocolate Chips
Target or Limit Value	#FFC125 (Hexadecimal RGB)	.01 MPa	.02 MPa	2 oz.	5"	0.3"	7 (100+ Sample Size)	$1	5 psi
Difficulty (0=Easy to Accomplish, 10=Extremely Difficult)	5	7	5	2	3	5	8	6	3
Max Relationship Value in Column	9	9	9	1	9	3	9	9	3
Weight / Importance	180.0	60.0	60.0	13.3	120.0	40.0	300.0	240.0	60.0
Relative Weight	16.8	5.6	5.6	1.2	11.2	3.7	28.0	22.4	5.6

Competitive Analysis line chart (scale 0 to 5)

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Title: Chocolate Chip Cookies - Functional Req's vs. Production Attributes

Author: John Doe

Date: 5/15/2008

Notes: "Weight" (Row #4) is not being addressed. Similarly, "Tensile Ultimate Strength" (Row #3) and "Size (diameter)" (Row #5) are not being substantially addressed. (Note their "Max Relationship Value in Row" values.)

Legend

Symbol	Meaning	Value
Θ	Strong Relationship	9
O	Moderate Relationship	3
▲	Weak Relationship	1
++	Strong Positive Correlation	
+	Positive Correlation	
−	Negative Correlation	
▼	Strong Negative Correlation	
▼	Objective Is To Minimize	
▲	Objective Is To Maximize	
X	Objective Is To Hit Target	

Column #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Direction of Improvement: Minimize (▼), Maximize (▲), or Target (x)	X	X	X	X	X	▼	▼	▲	▼	▼	▼	X	X	X	X
Quality Characteristics (a.k.a. "Hows")	Baking Time	Baking Temp	Order of Ingredients	Length of Wet Ingredient Mixing Time	Length of Dry Ingredient Mixing Time	Age of Cookie (Length of Time Since Baked)	Age of Ingredients	Quality of Ingredients	Cost of Ingredients	Exposure to Air	Cost of Packaging	Use of "Softening" Shortening	Use of "Crispening" Shortening	Use of Flavorful Ingredients	Ratio of Chocolate Chips to Flour

Row #	Max Relationship Value in Row	Relative Weight	Weight / Importance	Demanded Quality (a.k.a. "Whats")	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	9	16.8	180.0	Color	Θ	Θ											▲		
2	3	5.6	60.0	Tensile Yield Strength										O		▲			▲
3	1	5.6	60.0	Tensile Ulimate Strength										▲			▲		▲
4		1.2	13.3	Weight															
5	1	11.2	120.0	Size (diameter)	▲	▲													
6	9	3.7	40.0	Thickness	Θ	Θ											O		
7	9	28.0	300.0	Avg. Hedonic Scale Rating	O	O	Θ	▲	▲	O	O	Θ				O		Θ	
8	9	22.4	240.0	Cost per Cookie									Θ		O	▲			
9	9	5.6	60.0	Density of Chocolate Chips															Θ
10																			
11																			
12																			
13																			
14																			
15																			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Target or Limit Value	12.5 minutes	350 F - constant	Wet ingredients followed by dry ingredients	2 minutes	30 seconds	1 day	Manufacturer Recommended Shelf Life	Gourmet Quality	$0.60 per cookie	4 hrs	$.02 per cookie		Top 3 Rated in Gourmet Cooking Guide		1 to 1
Difficulty (0=Easy to Accomplish, 10=Extremely Difficult)	3	6	2	4	3	6	4	3	6	6	2	0	0	2	2
Max Relationship Value in Column	9	9	9	1	1	3	3	9	9	3	3	3	3	9	9
Weight / Importance	279.5	279.5	251.6	28.0	28.0	83.9	83.9	251.6	201.2	22.4	67.1	111.8	33.5	251.6	61.5
Relative Weight	13.7	13.7	12.4	1.4	1.4	4.1	4.1	12.4	9.9	1.1	3.3	5.5	1.6	12.4	3.0

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Title: Chocolate Chip Cookies - Production Attributes vs. Parts/Materials

Author: John Doe

Date: 5/15/2008

Notes:

Legend

Symbol	Meaning	Value
Θ	Strong Relationship	9
O	Moderate Relationship	3
▲	Weak Relationship	1
++	Strong Positive Correlation	
+	Positive Correlation	
−	Negative Correlation	
▼	Strong Negative Correlation	
▼	Objective Is To Minimize	
▲	Objective Is To Maximize	
X	Objective Is To Hit Target	

Column #			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Direction of Improvement: Minimize (▼), Maximize (▲), or Target (x)			X	▲	X	X	X	X	X	X	X	X	X				
Row #	Max Relationship Value in Row	Relative Weight	Weight / Importance	**Quality Characteristics** (a.k.a. "Hows") / **Demanded Quality** (a.k.a. "Whats")	Oven Type	Baker Experience / Education	Flour Type	Vanilla Type	Shortening Type (Butter)	Shortening Type (Vegetable Shortening)	Shortening Type (Margarine)	Egg Grade	Container Brand	Chocolate Chip Brand	Ingredients Shelving				

Row #	Max Rel.	Rel. Weight	Weight/Imp.	Demanded Quality	1 Oven Type	2 Baker Experience	3 Flour Type	4 Vanilla Type	5 Shortening (Butter)	6 Shortening (Veg.)	7 Shortening (Margarine)	8 Egg Grade	9 Container Brand	10 Choc. Chip Brand	11 Ingredients Shelving
1	9	13.7	279.5	Baking Time	O	Θ									
2	9	13.7	279.5	Baking Temp	Θ										
3	9	12.4	251.6	Order of Ingredients		Θ									
4	9	1.4	28.0	Length of Wet Ingredient Mixing Time		Θ									
5	9	1.4	28.0	Length of Dry Ingredient Mixing Time		Θ									
6		4.1	83.9	Age of Cookie (Length of Time Since Baked)											
7	9	4.1	83.9	Age of Ingredients		O									Θ
8	9	12.4	251.6	Quality of Ingredients			Θ	Θ	Θ	O	▲	O		Θ	
9	3	9.9	201.2	Cost of Ingredients							O				
10	1	1.1	22.4	Exposure to Air		▲							▲		
11		3.3	67.1	Cost of Packaging											
12	9	5.5	111.8	Use of "Softening" Shortening						O	Θ				
13	9	1.6	33.5	Use of "Crispening" Shortening					Θ						
14	9	12.4	251.6	Use of Flavorful Ingredients					Θ	▲				Θ	
15	9	3.0	61.5	Ratio of Chocolate Chips to Flour		Θ									

Target or Limit Value	Convection	10 yrs.	Cake Flour	"Real" (as opposed to imitation)	Butter	Vegetable Shortening	Margarine	A	Tupperware	Ghirardelli	Food Storage Shelving

	1	2	3	4	5	6	7	8	9	10	11
Difficulty (0=Easy to Accomplish, 10=Extremely Difficult)											
Max Relationship Value in Column	9	9	9	9	9	3	9	3	1	9	9
Weight / Importance	164.8	300.3	111.3	111.3	237.4	65.9	91.5	37.1	1.1	222.5	37.1
Relative Weight	11.9	21.8	8.1	8.1	17.2	4.8	6.6	2.7	0.1	16.1	2.7

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