

Value analysis : the disposable razor

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Summary

Introduction

I Project launch

II Functional and quality analysis : what for ?

III Value analysis

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Introduction

- ❖ Why such a choice ?
- ❖ An everyday object
 - most of men use this object
 - 30% of them are regular users !
- ❖ A suitable example to expose the value analysis method

I Project launch

Object : a disposable razor

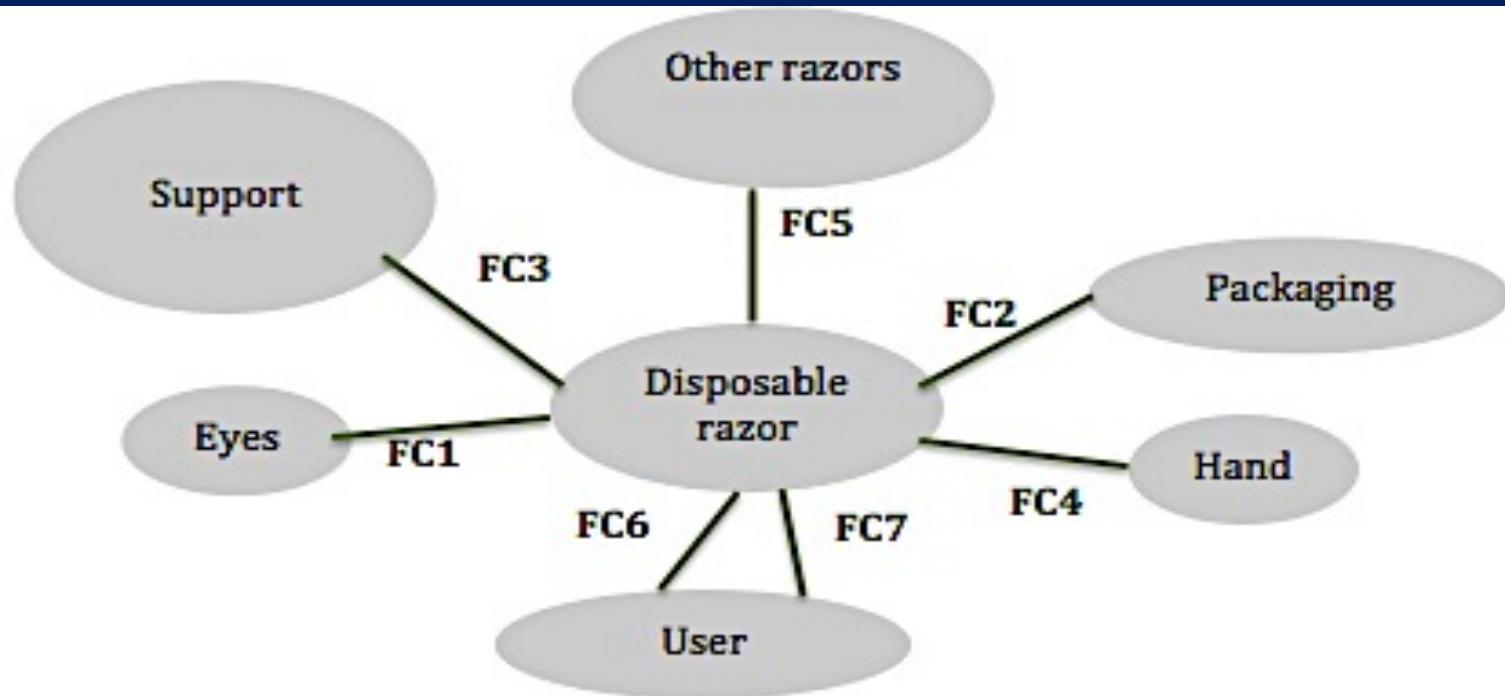


Objectives

- ❖ Reduce the irritation caused by the blades
- ❖ Reduce the global price

II Functional and quality analysis : WHAT FOR ?

BEFORE USE Analysis



FC1 : Be nice to see → global aspect + razor's color + brand's presence

FC2 : Let the razor insert easily into the packaging → speed of razor's exit

FC3 : Don't move on the support → global form

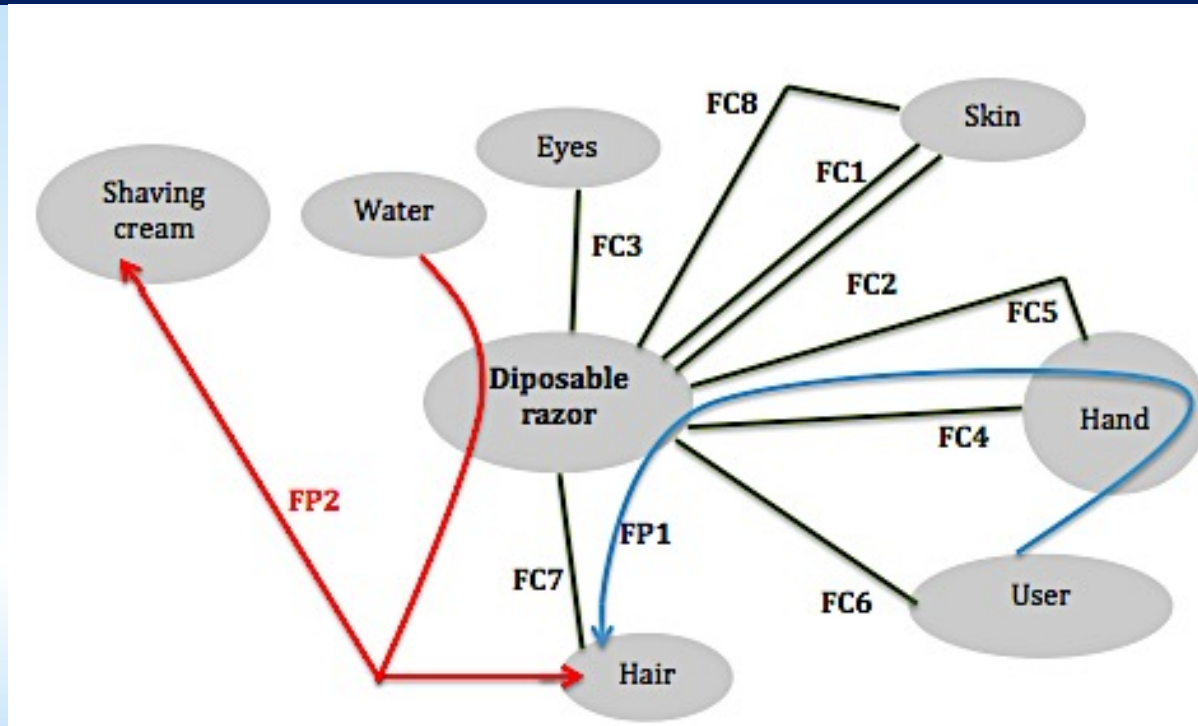
FC4 : Let the hand take the razor → accessory

FC5 : Let the razors fit together → global form

FC6 : Don't cut when it's not the good moment → big protection on the blades

FC7 : Be cheap → global cost

IN USE Analysis



FP1 : Let the user's hand cut hair → blades + accessory

FP2 : Let the water take the shaving cream and hair away from razor blades → blades' materials

FC1 : Don't irritate skin → additives

FC2 : Don't cut spots and mole → little protection + handle

FC3 : Be nice to see → brand + color + global shape

FC4 : Don't be too lightweight → global weight

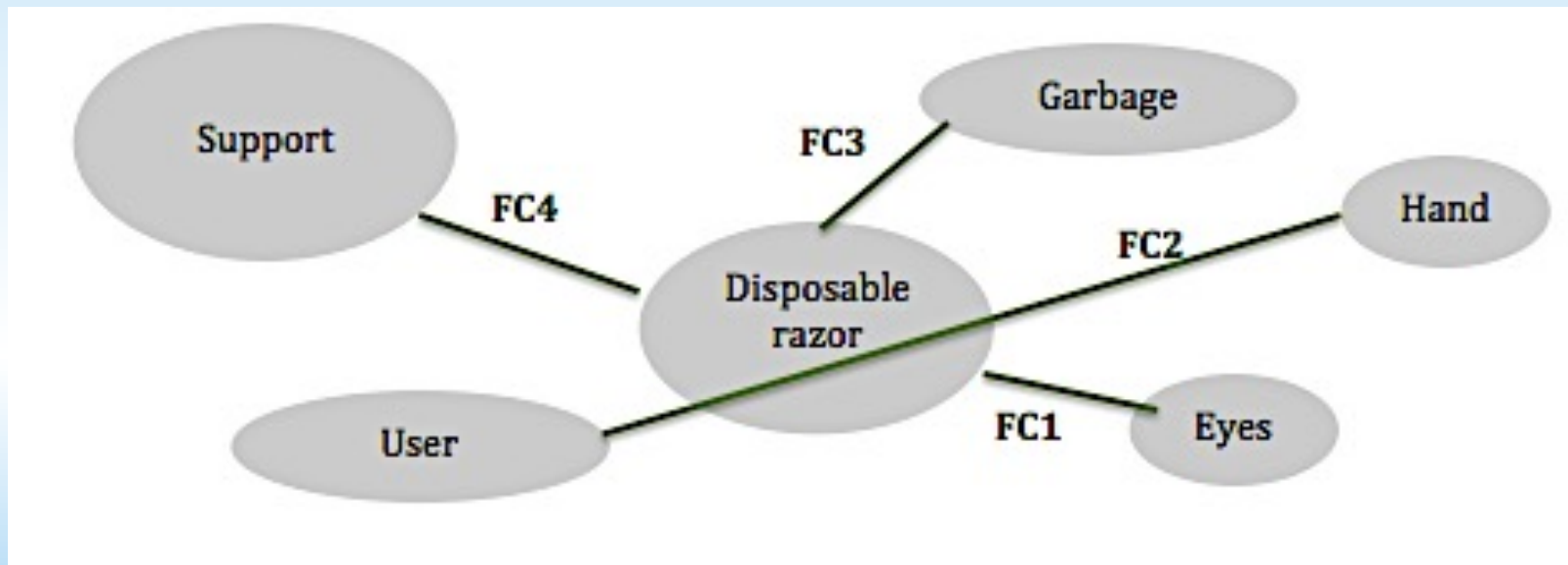
FC5 : Don't be too heavy → global weight

FC6 : Have a relatively long lifetime → blade's wear

FC7 : Have a precise hair's cut → number of blades

FC8 : Avoid all skin's cut risks → little protection + handle

AFTER USE Analysis



FC1 : Be nice to see → brand's presence + razor's color

FC2 : Don't cut when it's not the good moment → big protection on the blades

FC3 : Be recyclable → use of recyclable materials

FC4 : Don't move on the support → global shape

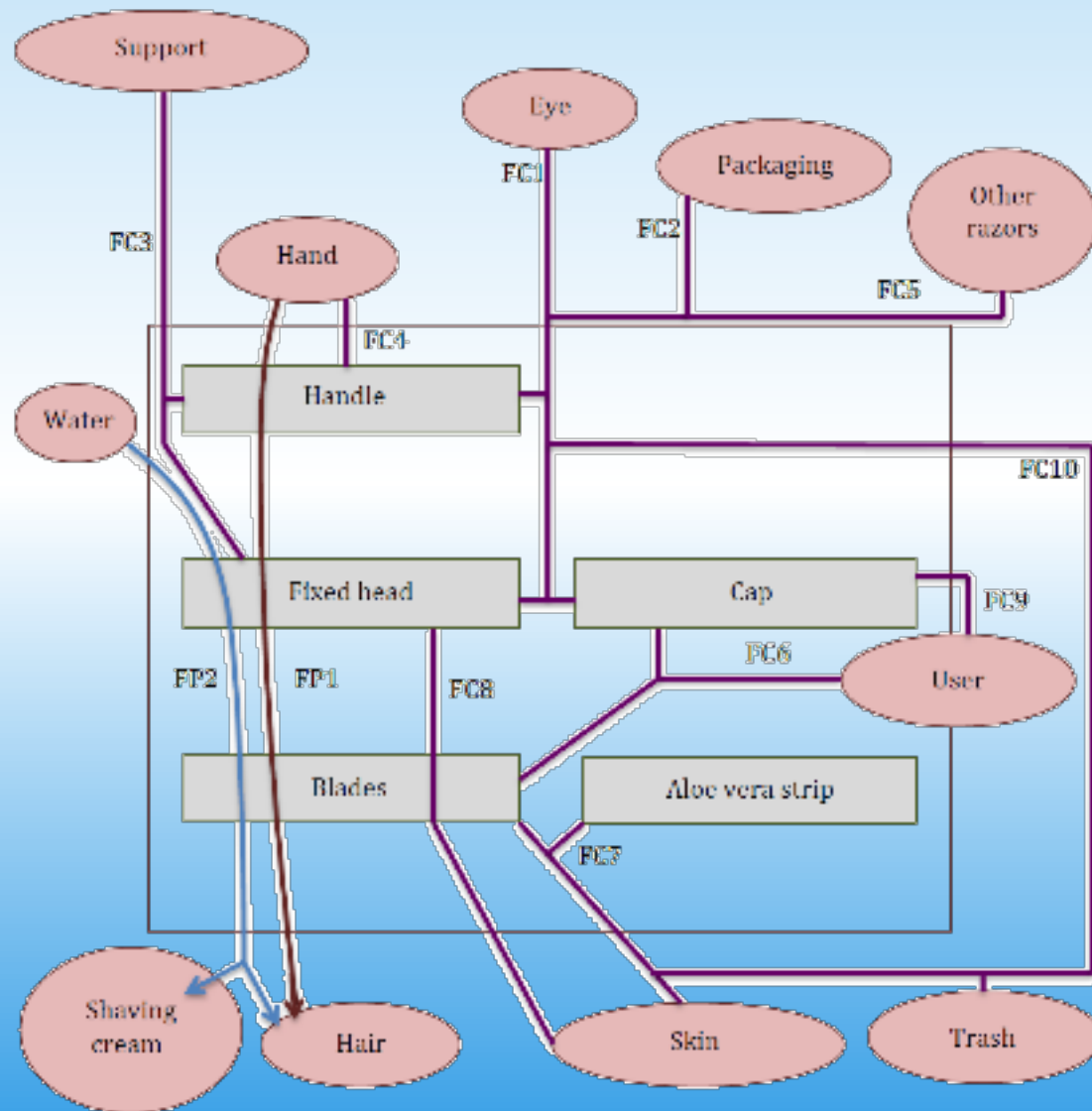
III Value Analysis

	Handle	Fixed head	Blade	Aloe vera strip	Cap	Total per function
	31%	20%	37%	3%	9%	100%
FP1	X	X	X			
FP2		X	X			
FC1	X	X				
FC2	X	X				
FC3	X	X				
FC4	X					
FC5	X	X				
FC6		X	X			
FC7		X	X	X		
FC8		X	X			
FC9		X			X	
FC10	X	X			X	
FC12	X	X				
FC13			X		X	
FC14		X	X			

	Handle	Fixed head	Blade	Aloe vera strip	Cap	Total per function
	31%	20%	37%	3%	9%	100%
FP1	X=3.8	X=1.5	X=5.3			
FP2		X=1.5	X=5.3			
FC1	X=3.8	X=1.5				
FC2	X=3.8	X=1.5				
FC3	X=3.8	X=1.5				
FC4	X=3.8					
FC5	X=3.8	X=1.5				
FC6		X=1.5	X=5.3			
FC7		X=1.5	X=5.3	X=3		
FC8		X=1.5	X=5.3			
FC9		X=1.5			X=3	
FC10	X=3.8	X=1.5			X=3	
FC12	X=3.8	X=1.5				
FC13			X=5.3		X=3	
FC14		X=1.5	X=5.3			

	Handle	Fixed head	Blade	Aloe vera strip	Cap	Total per function
	31%	20%	37%	3%	9%	100%
FP1	X=4.5	X=2.5	X=5.3			X=12.3
FP2		X=2.0	X=5.3			X=7.3
FC1	X=3.8	X=1.5				X=5.3
FC2	X=3.1	X=0.5				X=3.6
FC3	X=3.6	X=1.0				X=4.6
FC4	X=4.5					X=4.5
FC5	X=3.1	X=0.5				X=3.6
FC6		X=2.5	X=5.3			X=7.8
FC7		X=1.5	X=5.3	X=3		X=9.8
FC8		X=1.5	X=5.3			X=6.8
FC9		X=1.8			X=4.5	X=6..3
FC10	X=3.8	X=1.5			X=2.0	X=7.3
FC12	X=4	X=1.5				X=5.5
FC13			X=5.3		X=2.5	X=7.8
FC14		X=1.2	X=5.3			X=6.5

Relations functions / components



IV Creativity

	Handle	Fixed head	Blade	Aloe vera strip	Cap	Total per function
	31%	20%	37%	3%	9%	100%
FP1	Small rod	Support for blades	Cutting side			
FP2		Space for enable water to pass	Space for water to pass			
FC1	Brand	/				
FC2	/	/				
FC3	non-cylindrical shape	/				
FC4	Small rod					
FC5	/	/				
FC6		Plastic blade	Not too sharp blade			
FC7		"	"	Lotion fighting against the irritation		
FC8		"	"			
FC9		Rigid bag			Rigid bag	
FC10	Recyclable materials	Recyclable materials			Recyclable materials	
FC12	Be lighter than head	Be heavier than handle				
FC13			1 blade for each use		Rigid bag	
FC14		/	Effective blade			

Improvement ideas

What is concerned?	Current state	New solution	Cost gain	Cost generated
Handle material	Plastic	Wood	5 cents	
Handle length	Current length	2/3 of the length	4 cents	
Razor Head	One handle per head	2 combined heads on the handle	16 cents	
Cap	Current cap	Simplified caps	2 cents	
Lubricating strip	Aloe vera strip	Removed but better quality blade	5 cents	
Blade	3 blades	A single blade	26 cents	11 cents

Our new razor



V Implementation plan

Pain/Gain Matrix

Idea	Pain	Gain
Change the handle material	Less solid handle (2)	5 cents
Reduce the handle length	Less practical (1)	4 cents
2 heads per handle	Less practical (3)	16 cents
More ergonomic cap	Cap moving alone (2)	2 cents
Remove the lubricating strip	Higher irritation (2)	5 cents
A single blade	Less efficient shaving (2)	15 cents
		Total = 47 cents

Risk scale

1: Easy
 2: Implies corrections
 3: Hard
 4: Very hard

Action plan

Phase	Action	Service concerned	Time
1	feasibility study of the various improvements	Design office	3 months
1.1	feasibility study on the two shaving heads per handle	Design office	1 month
1.2	Feasibility study of the wooden handle	Design office	1 month
1.3	feasibility study on the new cap	Design office	1 month
2	Contact a wood supplier	Purchase	1 month
3	Realization of a production plan	Purchase/Production	2 months
4	Information on changes involved towards the employees in contact with the product	Marketing/Production	1 week
5	Order of new materials	Purchase	1 month
6	Manufacturing	Production	6 months
7	Marketing	Marketing	1 month

Conclusion

- ❖ A way to practice the value analysis method
- ❖ Several proposals which enable to reduce the price