

AW

VOC at Andersen Windows

WINDOWS • DOORS
Andersen[®]



Customer Focused Product Definition

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Andersen Corporation

- Andersen Corporation is the largest window and door manufacturer in North America.
 - Andersen Windows, Inc.
 - Renewal by Andersen
 - EMCO Doors
 - KML Windows
 - Silver Line Building Products
 - Eagle Window & Door
- The Andersen® brand is the most recognized and most used brand in the window and patio door industry.
- The privately owned company was founded in 1903



“Go To Market” Group

Architect Segment

Replacement Segment

Custom Builder/Remodeler Segment

Marketing Services

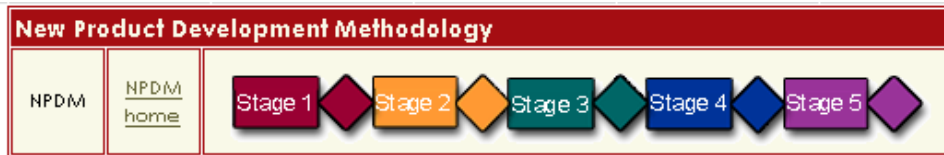
Marketing Technology

Customer Knowledge

Why did we need a process?

- Ad hoc approach
- Not always focused on “real” customer needs
- Needed structure & inputs for NPD process
- Lacking “innovative” products

VOC-Related Activities: Stage 1



Stage 1 Project Definition



Summary
 The purpose of this stage is to articulate a new product opportunity and identify legal requirements associated with it. At the conclusion of this stage, a project charter has been created.



Tasks

- ◆ Maintain current project status for project meet ([form](#))
- ◆ Prepare Preliminary Marketing Assessment ([form](#))
- ◆ Prepare Preliminary Technical Assessment ([form](#))
- ◆ Prepare Preliminary Financial Assessment ([form](#))
- ◆ Prepare Preliminary Fulfillment Assessment ([graphic example](#))
- ◆ [Contact Legal](#)
- ◆ Draft project charter
- ◆ Initiate PLM ([link to PLM web pages](#))

Marketing Activities:

- Identify market trends & needs
- Identify market opportunity
- Determine market segments
- Select attractive market segments
- Develop initial business opportunity assessment

Tools:

- Environmental Assessment
- Segmentation analysis
- SWOT

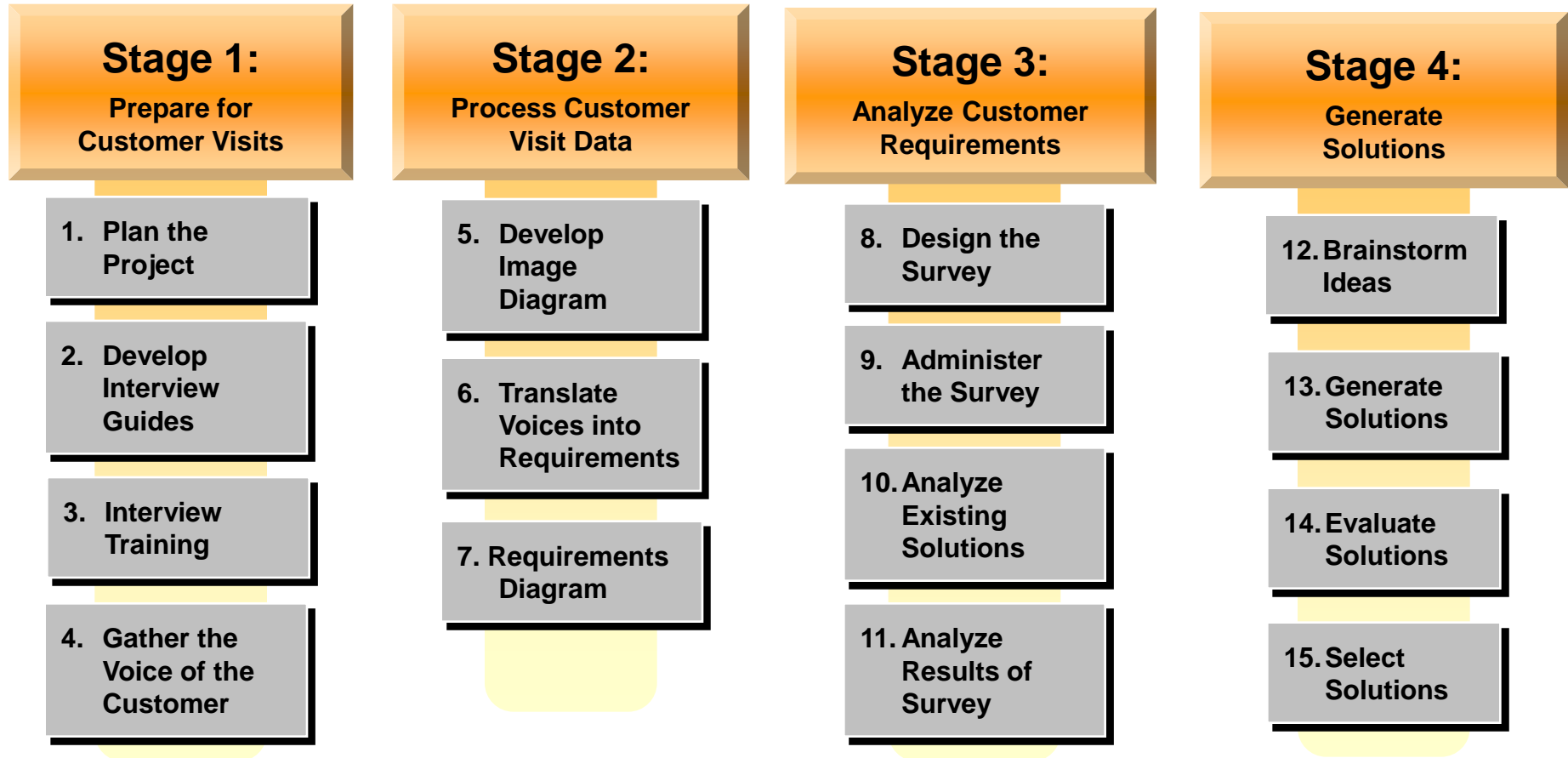
Cross-Functional Activities:

- Develop customer selection matrix
- Gather and document customer needs (VOC)
- Verify customer needs and rank importance
- Develop concepts
- Conduct internal capabilities analysis
- Evaluate concepts with customers
- Select concepts

Tools:

- Customer visits
- Affinity diagramming
- Kano/SSI surveys
- Pugh Concept Selection Matrix
- Monadic concept testing

Customer Focused Product Definition (CFPD)



Product Focused VOC: “Project Discover”

- Objectives:
 - Identify new product innovations that resonate with homeowners
 - Evaluate new VOC process – Product Development Consulting, Inc.
 - Incorporate learnings from Project Discover to customize the process for AW

Stage 1:
Prepare for
Customer Visits

“Project Discover”

- Contextual-based interviews were conducted by AW teams with homeowners in their homes February 21–April 6, 2006.
- Cities: Minneapolis, San Diego, San Francisco, San Antonio, Phoenix, Albuquerque, Seattle, Boston Metro, Boston Coastal, New York, Kansas City, Cleveland, Fort Lauderdale, Savannah, Atlanta
- 47 interviews total
- Teams of 2: Moderator & Note Taker
- Interviews recorded and transcribed

Stage 1:
Prepare for
Customer Visits



“It just gets so dirty from the dogs...I cleaned it probably two weeks ago and it looks like that.”



PVC pipe used for extra security in sliding door. Homeowner keeps it behind the TV in the living room.



Dogs made their own doggie door.



Homeowner preferred this decorative film as a privacy option – “I cannot stand blinds or drapes.”

Processing VOC Data: Image Diagram

- Allows the team to reach consensus regarding the customers' environment
- Is the key to capturing the voice of the customer
- Creates a single document that tells a story and can be shared
- Provides a foundation for discovering unstated customer requirements

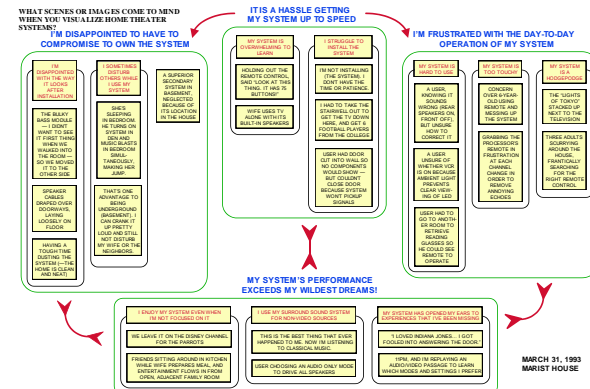
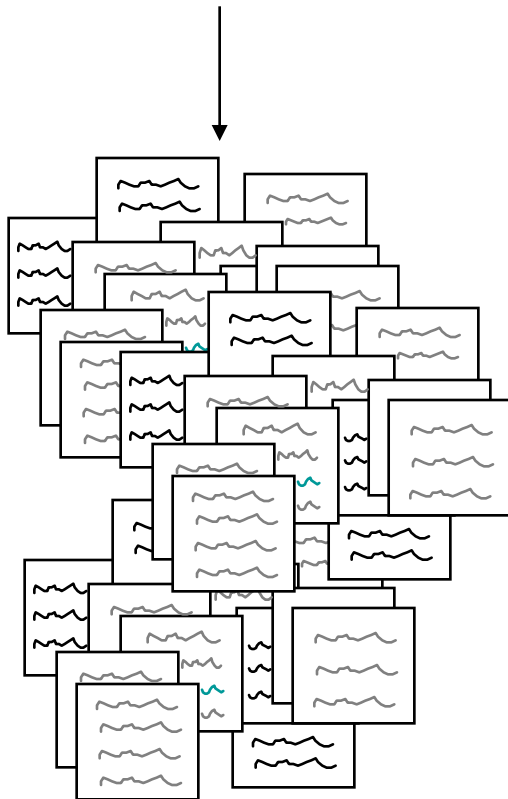
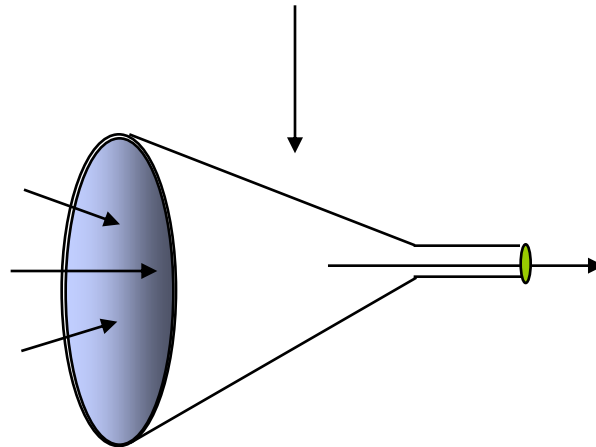


Image Diagram Process

Many images



“Red Dotting”
method



Reduced to 20-30 key
customer images

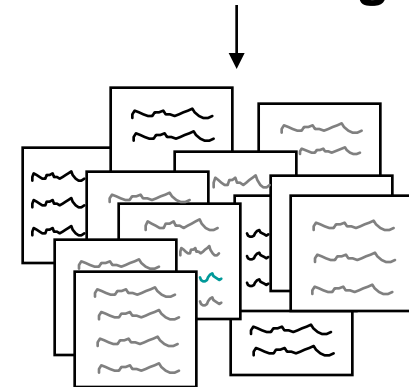


Image diagram

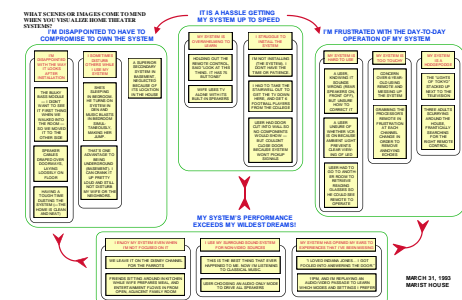


Image Selection



Stage 2:

Process
Customer Visit
Data

MANAGE THE EFFECTS OF THE OUTDOORS WHILE ENHANCING MY LIVING EXPERIENCE WITH MINIMAL IMPACT TO MY LIFESTYLE

WHAT ARE THE KEY SCENES OR IMAGES OF HOMEOWNERS OF SINGLE FAMILY DETACHED HOMES RELATED TO WINDOWS AND PATIO DOORS?

"THE UNIQUENESS [OF THE WINDOWS] REALLY ATTRACTED US TO THE HOME...IT HAS BEEN FAIRLY TIMELESS, YOU WOULDN'T THINK IT WAS 30 YEARS OLD

THESE ARE TOUGH TO LIVE WITH

IT IS A BURDEN TO MAINTAIN THESE

SOMETHING IS WRONG WITH MY WINDOW / DOOR

I AM NOT IN CONTROL

I HATE HAVING TO MANAGE THE OUT OF DOORS

NO MATTER HOW HARD I TRY, I CAN'T KEEP THESE CLEAN

"We get a lot of cottonwoods here, so we get the problem with the screens getting fuzzy"

"Right now I feel embarrassed because my windows are dirty...they look spotty & dirty &...I don't like it"

IT'S A BURDEN TO MAINTAIN THESE

"Wood is susceptible to the elements, you have to protect it more. Just like a boat, I've had several boats, & woodwork in my mind is a pain, sanding & varnishing"

"I can't imagine what it costs to replace the screen, & all it would take is one dog scratch, & then it doesn't keep bugs out so what's the point you know, and it just, one hyper dog day"

SOMETHING IS WRONG WITH MY WINDOW

"When I use my wheelchair, it's hard to get in & out of a door really quick & close it...Maddie [cat snuck out because door open too long]"

SOMETHING IS WRONG WITH MY WINDOW

"One day there was a mushroom growing out of the windowsill, & I said oh my god, the windowsill fell apart in my hands, & I said I don't think wood is the way to go:

"But I still have that thing where I don't feel like they were all installed properly. Because even when the window guy came out & went outside to look at them & said you didn't seal this one...he said it was normal, I didn't have that confidence"

"My Son reads to me every night, & I'll sit on his bed, & I move away from the window, because I feel [the draft]"

THIS SUCKS! I CAN'T PHYSICALLY OPERATE THEM!

"With my arthritic hands, I can't put enough force to open the door...It hurts. The force required educating pain in my right hand, so I do the left one"

"To get these screens out was a joke & a half...you have to pull, it warps the frame...it's cumbersome"

"It makes me get mad because I can't open it [window over the kitchen sink]. I have to wait for my husband to come home, or somebody else to open it for me."

I AM TERRIFIED AT THE THOUGHT OF AN INTRUDER ENTERING MY HOME!

"I would never let out child sleep with the window open; I was just too concerned for her [safety & security]"

"Putting the 2X4 in the bottom of it [patio door sill] is a pain in the ass too."

"I'm OVER-EXPOSED TO MY NEIGHBORS"

"I will be walking the dog - [the neighbors] have the same type of window - and you can see them in there and they are doing their dishes. You can see right in...and I think about them when I see them, like God, people can see me right there. My friend stops by, 'Oh yeah, I saw you in the kitchen.' I am like 'what was I wearing?' 'You were wearing something blue.'"

"This morning when [my neighbor] went to work...you could hear his conversation with his dog. In the summer I can hear - if their window is open - what they are putting on their sandwiches."

"She [daughter] likes to look outside, she goes to our bedroom [open] window, stands on a stool to look at the birds...I don't want her to one day push it [the screen] off."

I HATE THE FACT THAT I HAVE TO REGULATE THE SUN TO ENJOY MY HOME

"When the kids are watching a movie late in the afternoon, they close the blinds, it's a hassle with the blinds to close them & open them every time."

"I don't want to have the blinds closed all day - it should be light - that's what daytime is about...But that's where the TV has to go, so we put the blinds up to accommodate that [glare]."

"We switched the furniture in there because it was staining [fading] the chairs, the fabric on it...Rotate the furniture; have to close the blinds in the afternoon, when the sun goes down."

I KEEP MY HOUSE CLOSED UP TO STOP THE CLIMATE FROM IMPACTING ME

"In Arizona you don't leave [windows] open, it either too cold, rainy season is too damp, or it's way too hot in the summer to leave it open because you are always running air conditioning, here you basically live in a bubble."

"Mostly it's good, but we get to the point where we need to block out a little bit of the sunshine, because it's hot, brutally hot, we love sun, ... It's nice to see the light."

I JUST CAN'T STOP THESE TEENY LITTLE THINGS FROM INFILTRATING

"We have no see'ums or sand the size of the head of a pin, & they seem to get through a crack"

"She as a lot of allergies, so...it's only a short period of time that they [windows] are open"

I AM NOT WILLING TO PAY THAT MUCH FOR WINDOWS

"The homes on the website were mansions basically in my view, but I'm a white-collar college grad...I'm not a millionaire, so I don't have a need for Andersen windows...I'm not buying Mercedes windows - I'm not the right consumer"

"If I had 20 grand to dump into a room... & if windows were in that budget, it would be one of the first things I'd look at taking out. I don't think are is bang for the buck in windows. I'd rather put it into flooring, wall covering, lighting or something else"

BRING THE OUTDOORS IN MAKES ME FEEL GOOD

"Without windows I was getting all depressed. I was finally like why am I getting depressed, oh my god. I live in a cave. I'm working in this little dungeon and it's miserable. I hated it, I need light"

"Why do I store them? Because the view is so much better without the screen in the winter. Even now, I will just put the 2 screens on; I don't put the 4 screens on, because I like the clearer view"

"It [open windows] changes the air in the house...it's more peaceful than just having the AC running. It's a change for a while, just to have something new come into the house. It's almost like [the home] it's refreshed, or taking a breath or something"

"I wouldn't keep the windows closed ever to keep out sounds of summer. It's just, listening to the crickets & the frogs in the summer, music."

I CAN'T GET STRAIGHT ANSWERS

"[Out contractor] went to pick up the [AW] door at the Home Depot, & it came in pieces - in boxes. It had to be assembled. [He said] 'I'm going to have to charge you extra from what I quoted.' And I was a little upset...I was just not a happy camper."

"It's really difficult to get someone that knows what they are talking about [at Home Depot. If you have to go back] and it's a different person, they are going to tell you a different thing, suggest a different type of thing, so you don't really feel like they are experts in any one area"

Translating Voices into Requirements

- Requirement: A statement of what functionality a product or service must possess in order to satisfy or delight.
- Purpose: To clearly state the customer needs implicit in the verbal data from the interviews (voices).
- Team activity
 - Achieved consensus on approx. 30 key requirements
 - Used iterative “red dotting” process
- Customer requirements were tested quantitatively

Stage 2:
Process
Customer Visit
Data

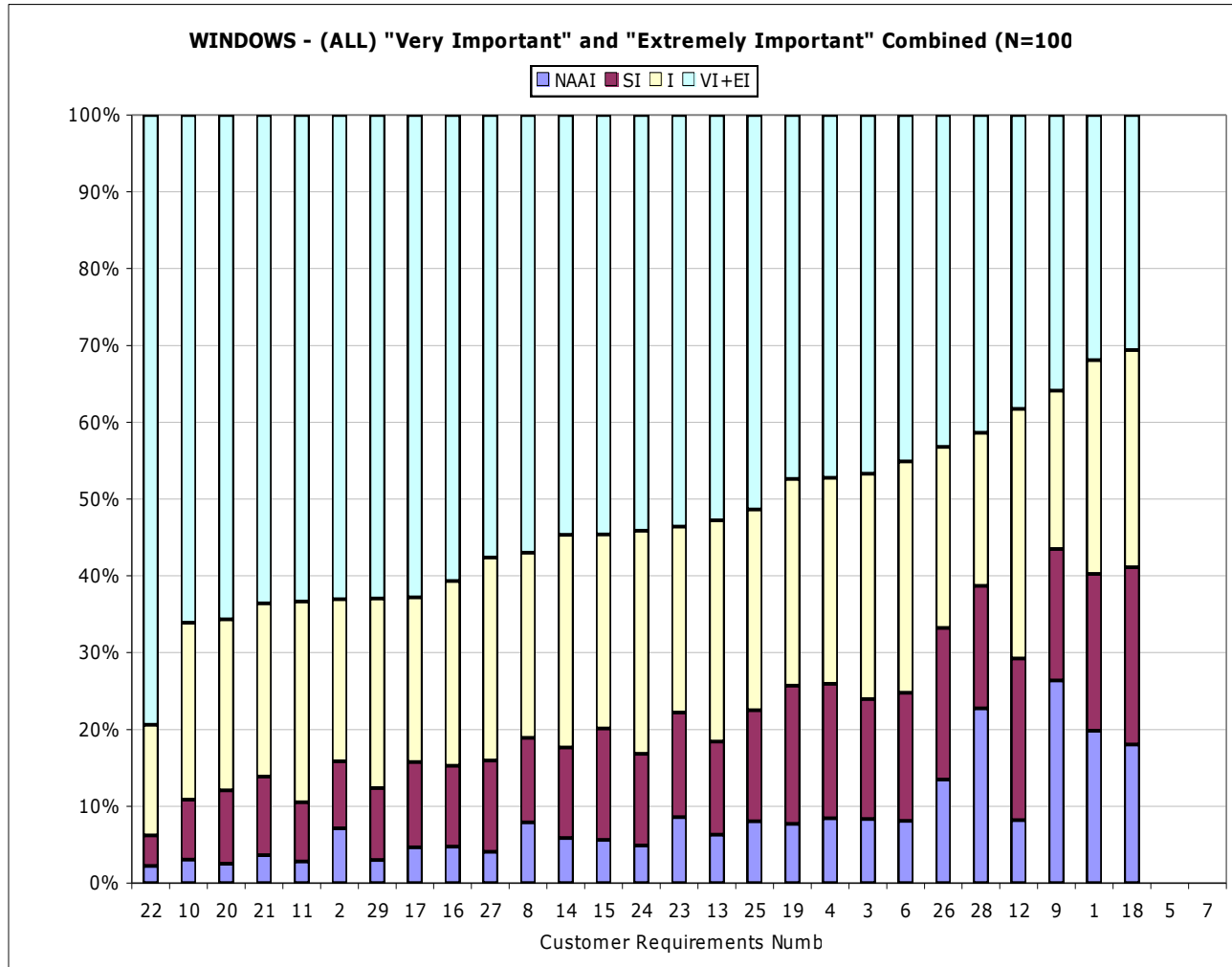
Quantifying the Data: Kano Survey

- A Kano survey was used to prioritize customer requirements in conjunction with a stated importance survey.
- The survey was administered to 2,000 homeowners who participate in an on-line panel (1,000 windows/1,000 patio doors).
 - Income \$50K +
 - Primary decision-maker (or jointly)
 - Within one of our four target segments
 - Windows less than 30 years old.

Stage 3:

Analyze Customer
Requirements

Self-Stated Importance Results



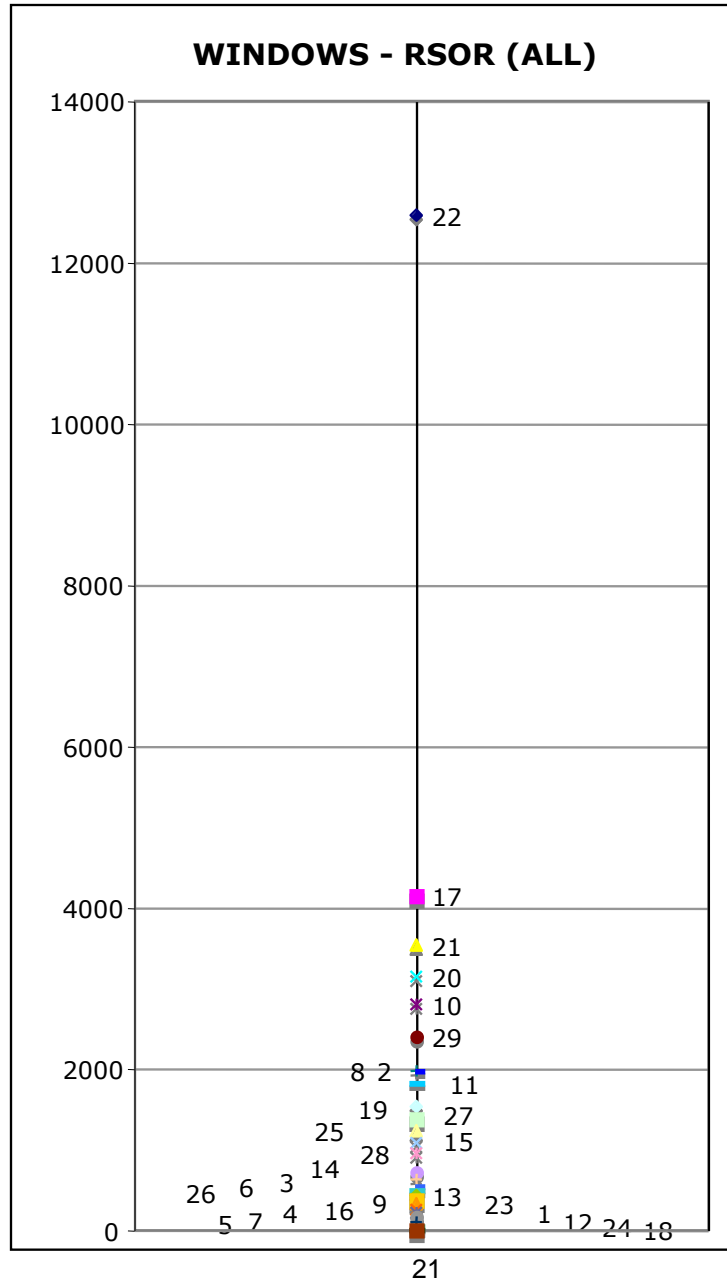
Stage 3:
Analyze Customer Requirements

Reflected Sum of the Ranks (RSOR)

- Helps perceive the magnitude of differences between “Extremely Important” scores.
- Forces respondents to stack rank all of their “extremely important” requirements into first and second place.
- RSOR tell us which “extremely important” requirements were ranked #1 most frequently.

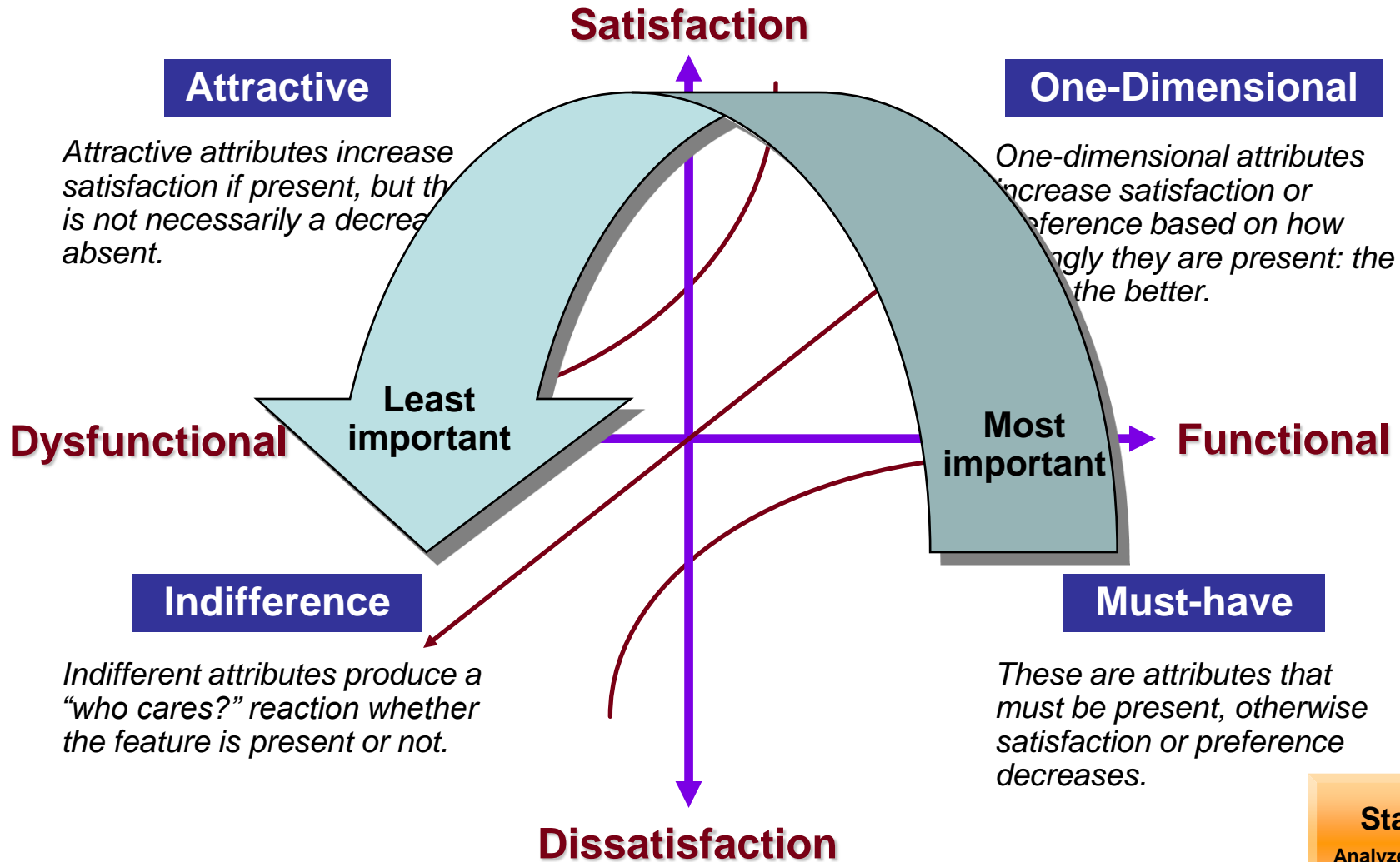
Stage 3:

Analyze Customer
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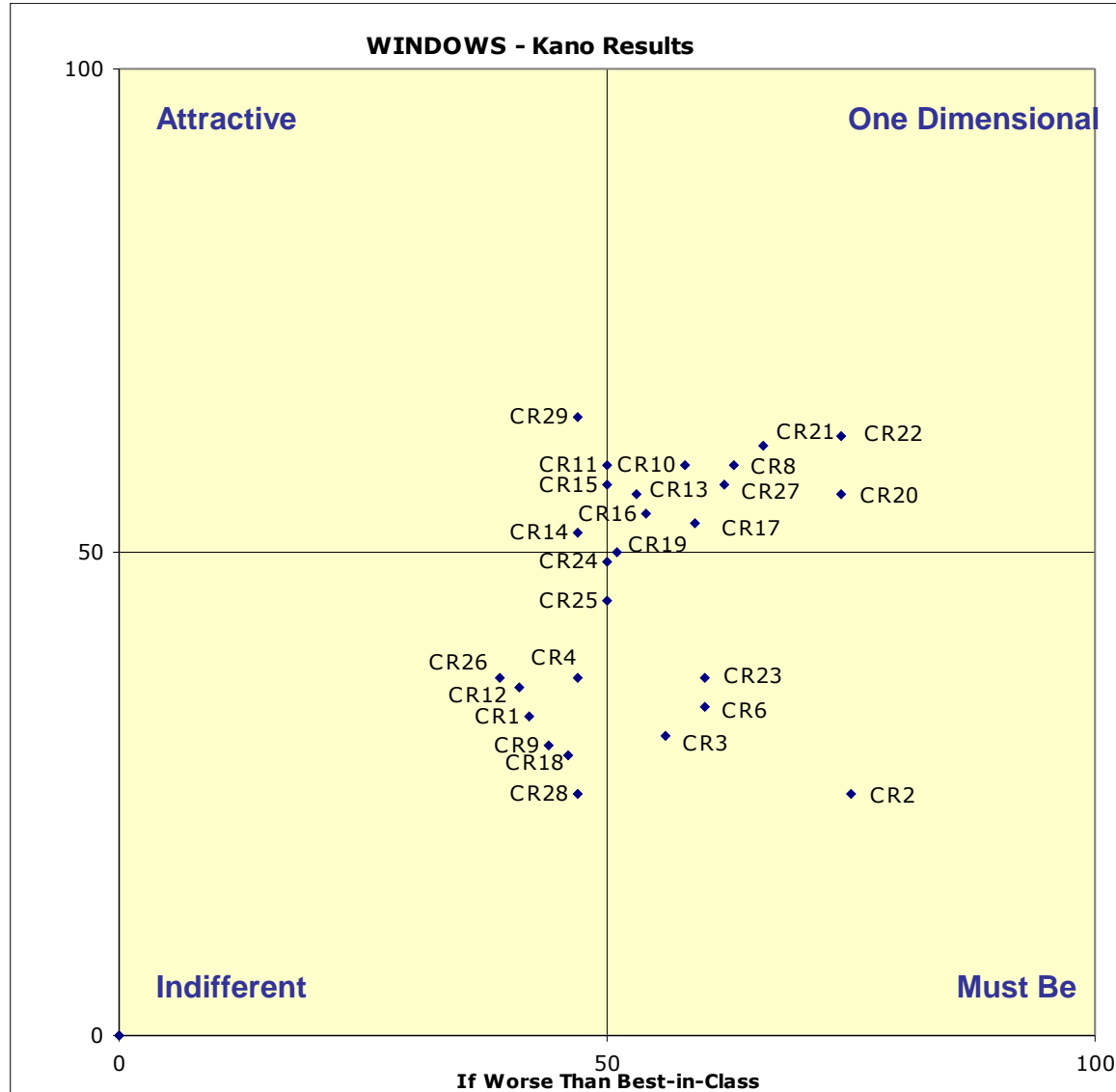
Stage 3:
Analyze Customer
Requirements

Kano Model



Stage 3:
 Analyze Customer Requirements

Kano Results



Stage 3:
Analyze Customer Requirements

Brainstorming Activities

- 3-day session
- Included creative thinkers outside core team
- Focused on most critical requirements

Stage 4:

Generate
Solutions

Evaluate Solutions – Solutions Matrix

- Leverage Kano scores
- Take into account best-in-class competitive solutions
- Evaluate constraints
- Scores allow team to identify best features

“Project Discover”: Outcomes

- Identify new product innovations that resonate with homeowners
- Evaluate new VOC process – Product Development Consulting, Inc.
- Incorporate learnings from Project Discover to customize the process for AW

**Five “Opportunity Areas”
to drive Strategic
Innovation**

**Well-received within
organization**

**Adopted as AW best
practice**

Simplified solutions matrix

**Recognize need for formal
NPD organizational
structure**

Project “Forever”

Trade Service VOC