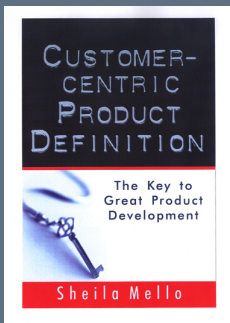




Using Voice of the Customer to Create Value

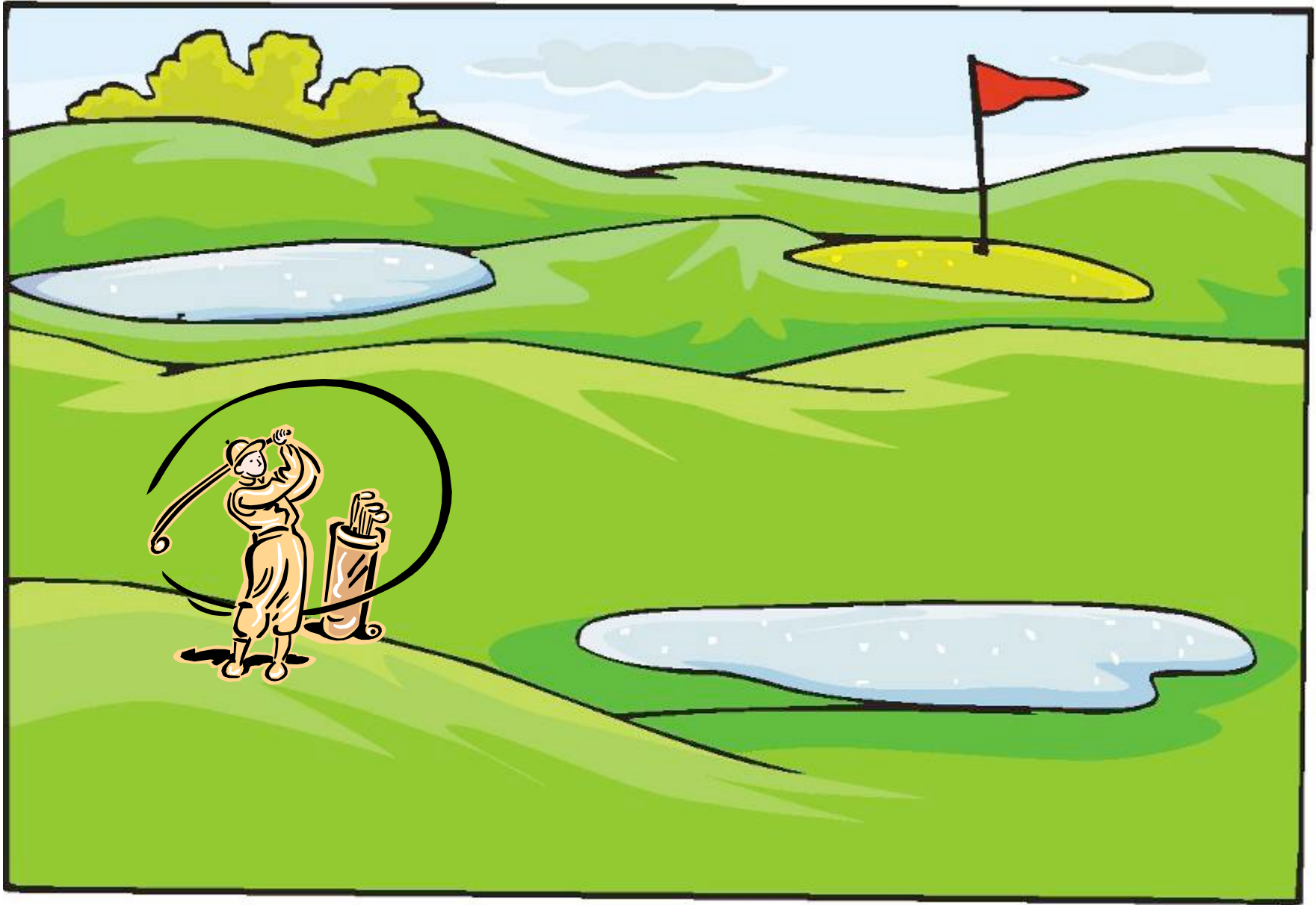


Sheila Mello

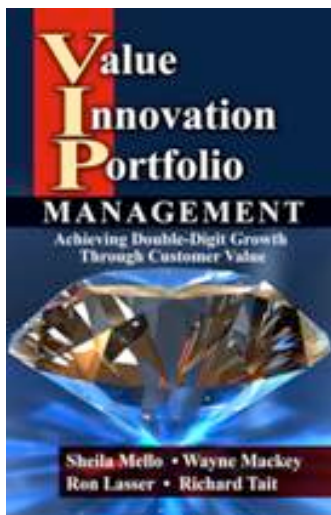
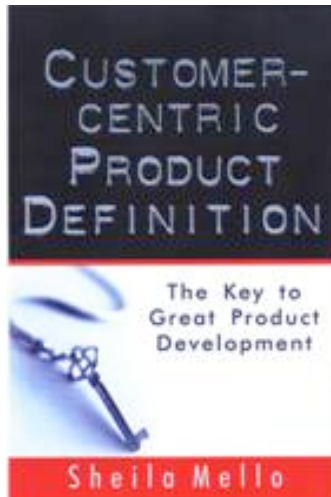
Managing Partner

Product Development Consulting, Inc.

smello@pdcinc.com



Basis of Authority: Who are we?



- “Principals only” firm with significant experience based on careers in product development
- Noted authority in product development
 - Customer requirements / product definition
 - Author of “Customer-centric Product Definition - The Key to Great Product Development” 4th edition 2005
 - Innovation / Portfolio / pipeline management
 - Author of “Value Innovation Portfolio Management - Achieving Double-Digit Growth Through Customer Value” 1st edition 2006

Representative PDC Medical Device Clients

SIEMENS

Luminex

 **Bristol-Myers Squibb**
Together we can prevail.™

MEDRAD
Performance. For life.™


Abbott Laboratories

PHILIPS

 **BD**

 **ETHICON ENDO-SURGERY, INC.**
a Johnson & Johnson company

 **Applied Biosystems**

WelchAllyn

stryker

 **BECKMAN COULTER**

Johnson & Johnson


BIOMÉRIEUX

Agenda

9:30 – 9:45	Why Should You Care?
9:45 – 10:45	Collecting the Voice of the Customer
10:45 – 11:00	Break
11:00 – 11:30	Translating Voices into Requirements
11:30 – 12:00	Optimizing your R&D Spending

Why is This Important?

- The benefits of a robust VoC process
- Who should be involved and why?
- Where the process fits into your product development process

If This isn't Enough?



- 80% of new products fail in the marketplace
- 46% of development resources are spent on projects which commercially fail or never make it to market
- 45% of new products missed market share and deliver lower than expected profits and returns
- 96% of all new projects fail to meet or beat their ROI targets

Fast Company 2007

Reference: Business Week Special Report, August 1 2005,

"How to Build Innovative Companies" by Bruce Nussbaum

"How Customer's Think" by Gerald Zaltman., Harvard Business School Press; (February 21, 2003)

What Happens if You Don't Gather VoC?



"In Motorola's case, historically we viewed things inside out as opposed to outside in. And at certain points in our history we developed an unhealthy hubris that manifested itself in us thinking we knew what was best for customers, as opposed to listening in an unfiltered and unemotional way to what customers were telling us.."

Gregory Q. Brown, Co-Chief Executive, Motorola, quoted in BusinessWeek



*You can't just ask customers what they want and then
try to give that to them.
By the time you get it built, they'll want something new.*
- Steve Jobs

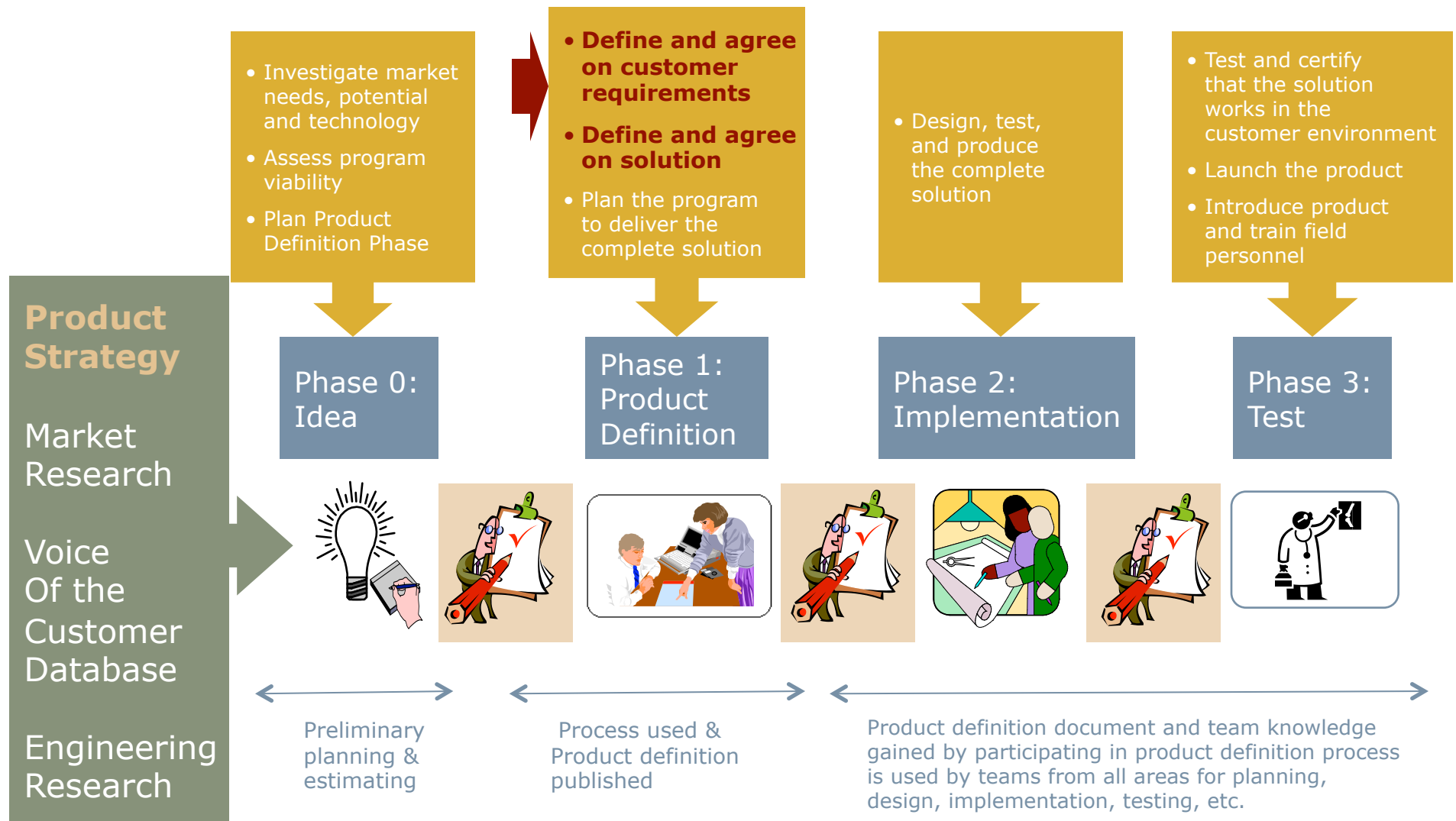
You can't Survive without Cross-Functional Teams



Cross-Functional Teams Video



Where Defining Customer Requirements Fits into New Product Development

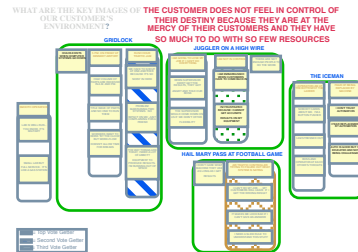




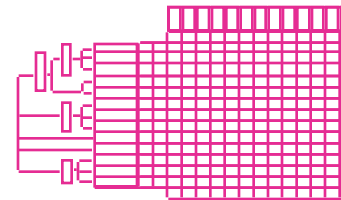
Customer Visit Preparation

You Need to Focus on Innovating “Underneath” the Customer’s Stated Desires

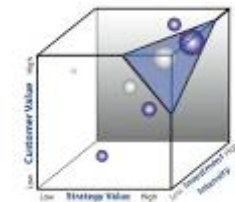
**Capture the
“Voice of the
Market”**



**Process What
Customers
Told You**

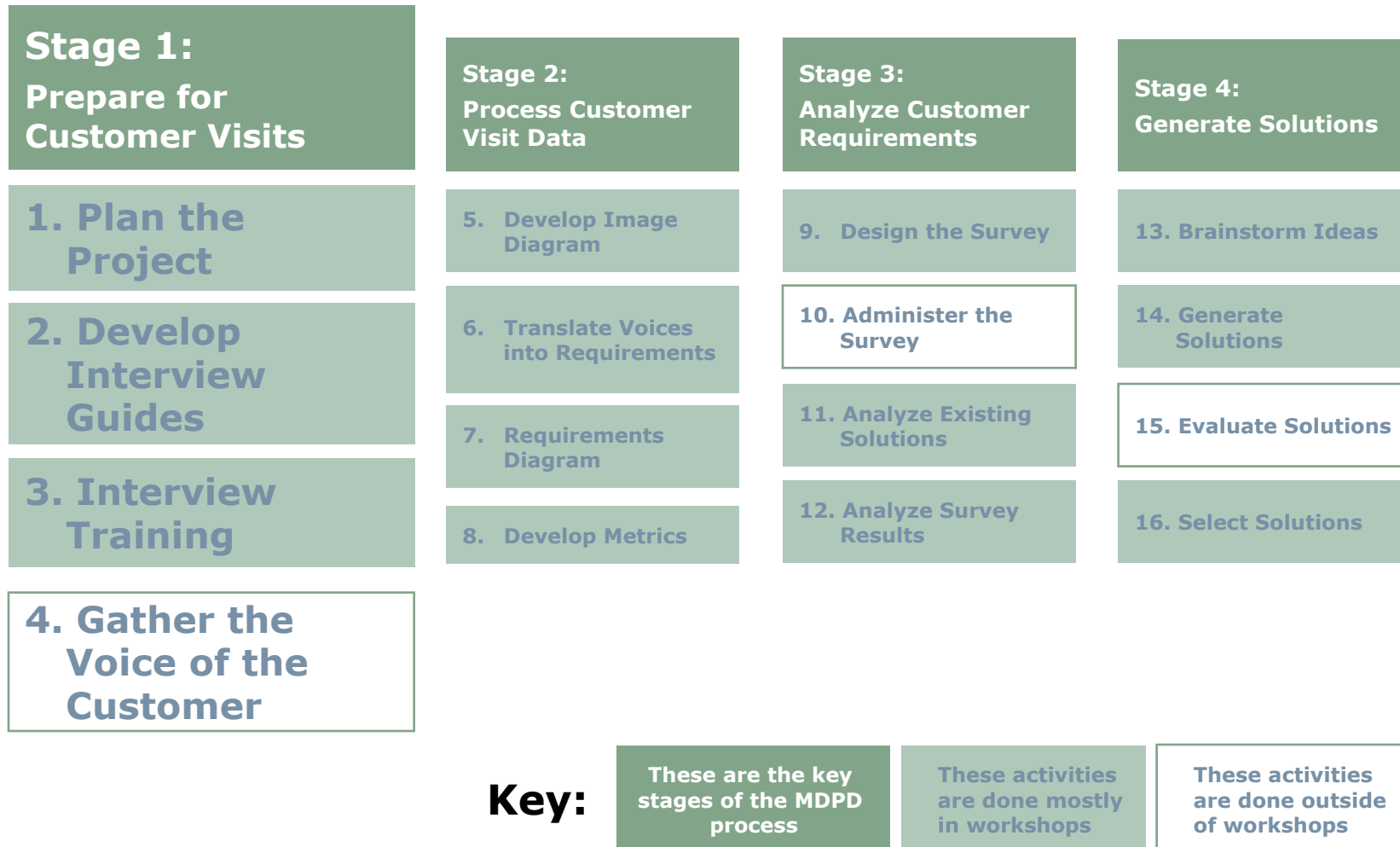


**Assess
What
Customers
Value**



**Innovate to
Create
Customer
Value**

Market Driven Product Definition (MDPD®)



VOC: What Types of Customer Input?

With the customer in customer's environment

- Customer interviews
- Contextual inquiry
- Plant tours

Objective:
Empathize with the customer

Means: On site
1 on 1 interview with the customer

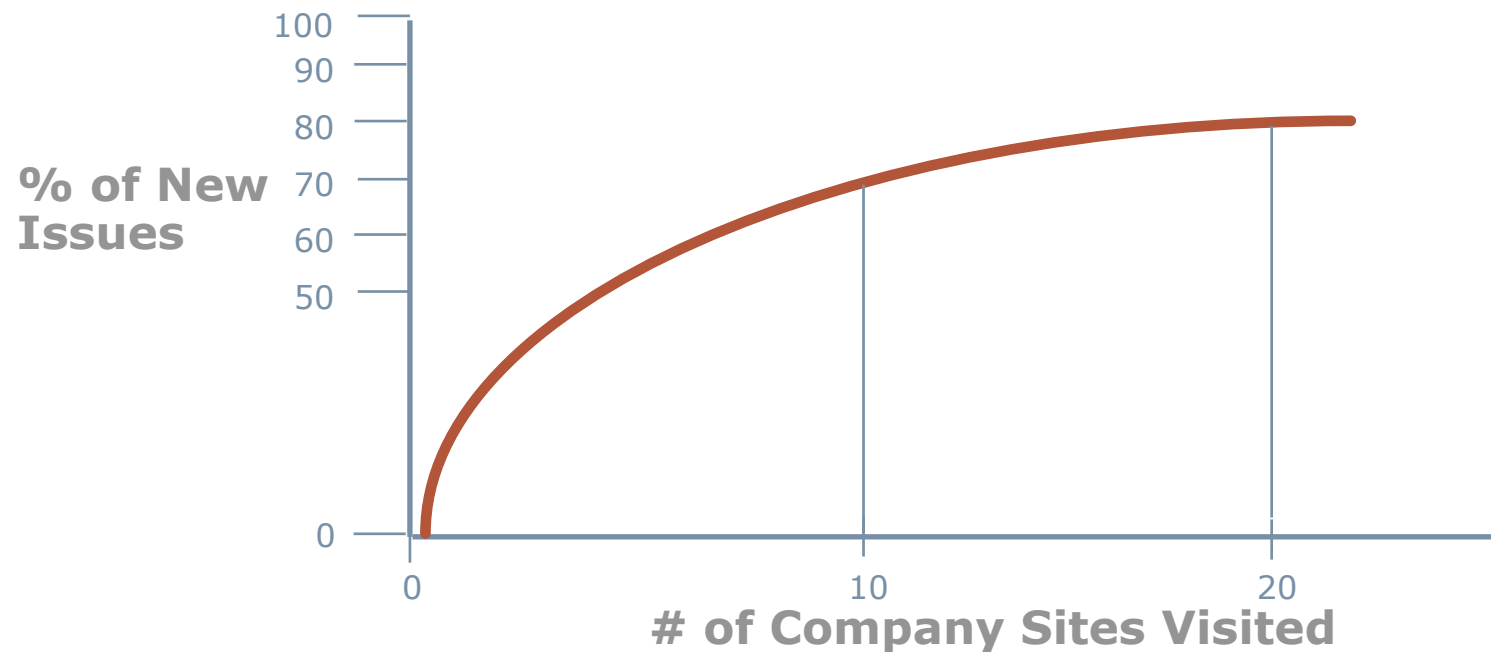
With the customer away from their company

Focus groups
Meetings at trade shows
User labs
Home office visits

Distant from customer

Telephone calls
Mail

Information versus Number of Visits



Number of new issues becomes asymptotic after 10 different site visits. Ideal number is between 10 and 20 company visits for each distinct market segment.

Reference: Abbie Griffin and John Hauser, The Voice of the Customer, MIT Marketing Center Working Paper no. 91-2, Cambridge, January 1991

Typical Target Values for Visitation

- 10–20 customer sites total
- 3–5 individuals/site
- 3–5 sites/market segment or customer type
- 3–5 individuals/function or title

Developing an Interview Guide



- A guide—NOT a questionnaire
 - Point of departure for insightful dialogue—not a market research survey
- Think about which areas you want to explore with which function; you need not ask everyone the same questions

Interview Guide: Types of Questions

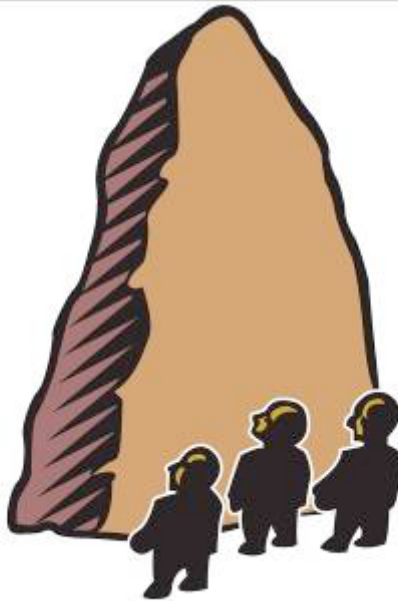
- “What” questions focus on happenings
 - What events led up to ...?
- “How” questions focus on the way things happen
 - How does the product allow you to ...?
- “Why” questions search for reasons
 - “Why is it that ...?”
- “Could” questions are open-ended
 - “Could you conceive of an example of ...?”
- Other types of questions:
 - “Are,” “do,” or “can,” are often closed-ended questions - It’s better to ask, “Describe a case when ...?”
 - A long pause can elicit a rich response
- “What else?” will elicit more responses than “Is there anything else?”

Opening Statements



Build Trust

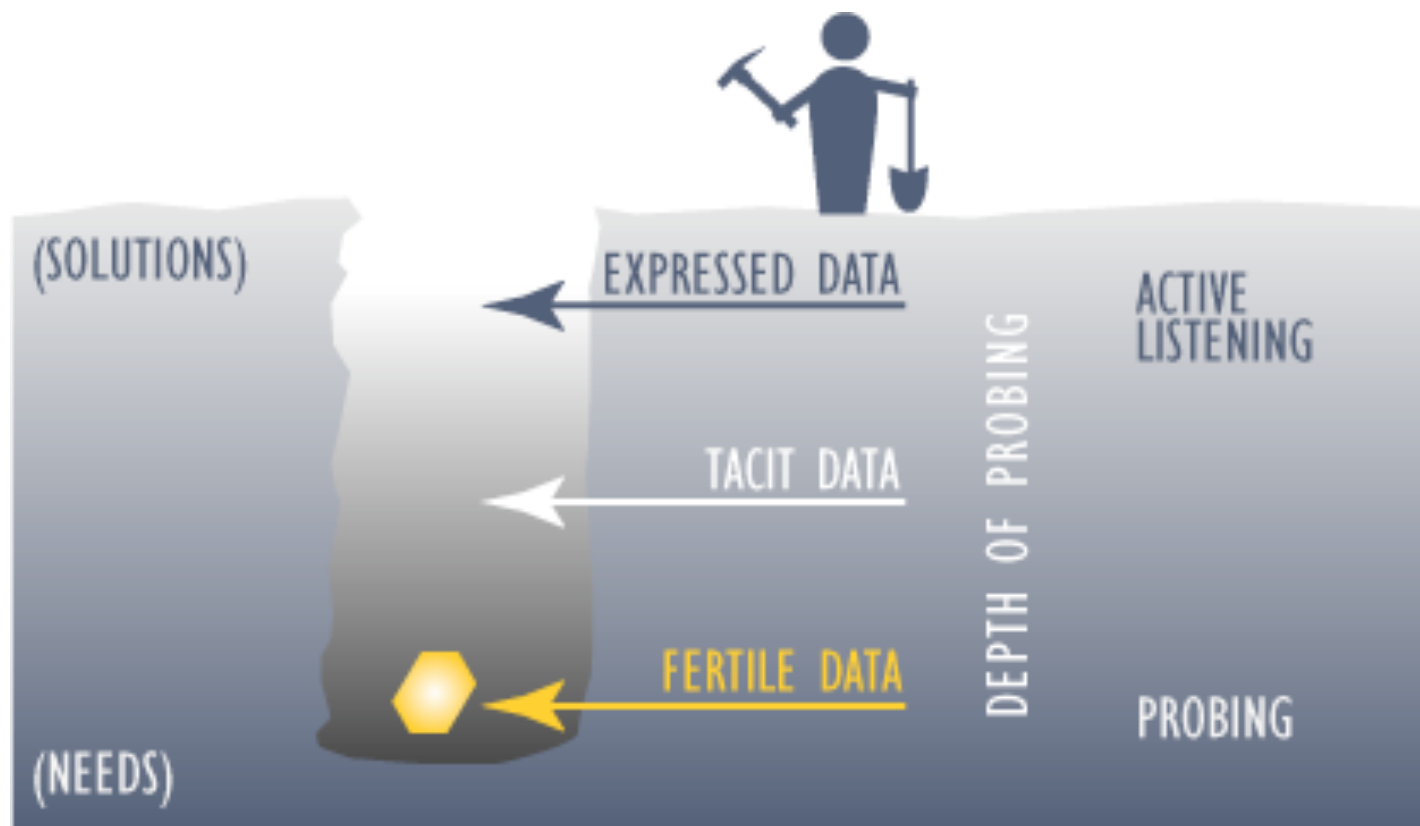
Example Interview Guide



Probe and ask for
examples!!!

1. Describe yourself as a *golfer*, including your goals and how you measure yourself?
2. Describe your typical day as it relates to *golf*. Include likes, dislikes, examples. Best case? Worst case?
3. What about *golfing* related to *your golf bag* gets under your skin or makes your blood boil?
4. Describe your ideal *golf bag*. What problems would this solve?
5. Compare and contrast the way you currently use your *golf bag* to what you see in the future?

Mining for Gold



Purpose of Customer Visits

Discovery ...
You need to walk in your customers' shoes ...



- Concentrate on real cases, not hypothetical scenarios
 - Drive the customer to richly describe actual experiences
 - "Can you give a recent example of this?"
- Prepare yourself to be extremely curious and inquisitive
 - Your role is to discover new knowledge!

Five Principles for Collecting Soft Language Data



1. Visits are for collecting qualitative data, NOT quantitative data
2. "Chance favors the prepared mind" – Pasteur
3. "It is by logic that we prove, it is by intuition that we discover" – Poincaré
4. "Incongruities are the greatest source of discovery" –Drucker
5. Allow customer to guide the discussion

What Customer Visits Are NOT



"Objection! The Prosecution is attempting to lead the witness!"

- Not selling opportunities
- Not for solving customer problems
- Not for validating what you think the features should be in your product



Break for 15 minutes



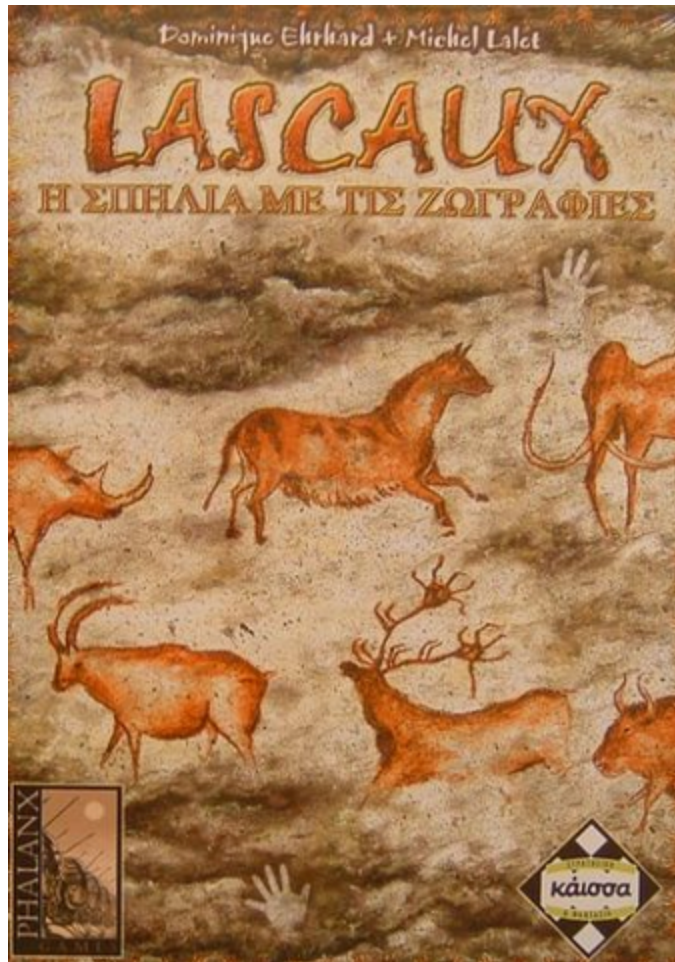
Exercise

Example interview

Translating the Voice of the Customer into Requirements

- Extracting the customer story
- Techniques to translate customers' expressed thoughts into unambiguous customer requirements
- Achieving group consensus on the customer requirements

Why Images?



“Stories define us. Since early cave dwellers left their graffiti in Lascaux, listening to and telling stories have moved people. Stories are powerful: They give meaning and context to what would otherwise be a collection of easily forgettable facts. Stories invoke the imagination so that listeners begin to own them almost as much as the teller.”

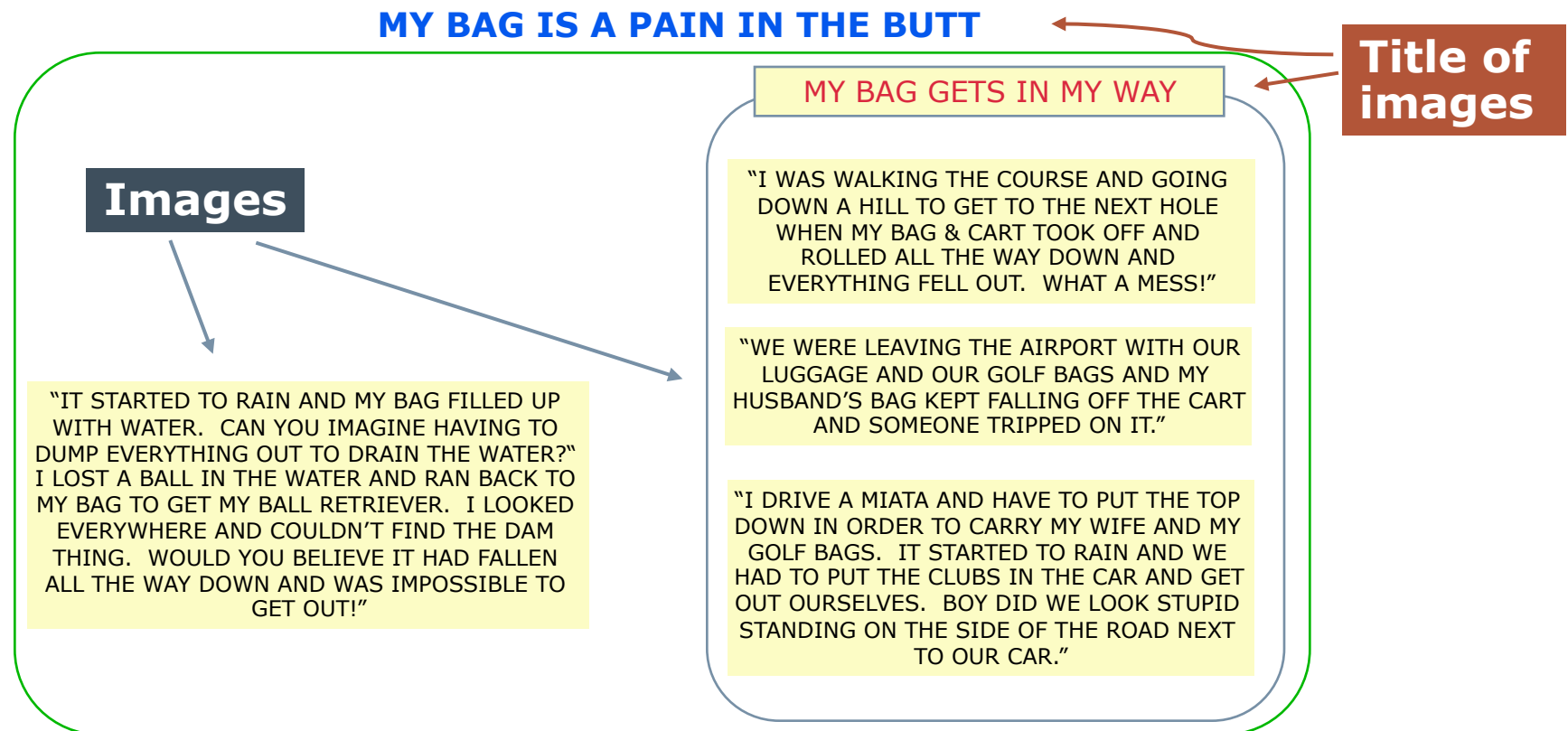
— Simon Kelly, ADWEEK

Image Examples Video



Grouping Images: Golf Bag Example

What scenes or images come to mind when you visualize your customer and their environment?



WHAT ARE THE KEY CUSTOMER IMAGES OF GOLFERS RELATED TO GOLF BAGS?

MY BAG DOESN'T HELP ME PROTECT MY EQUIPMENT

MY GOLF EQUIPMENT GOT RUINED

"WHEN WE PLAYED IN SILVERADO, I RETRIEVED MY GOLF GLOVE IT WAS SOAKING WET FROM THE PREVIOUS DAY. IT WAS VERY UNCOMFORTABLE AND COLD."

"MY PARTNER'S GRIPS GOT WET IN A RAIN STORM AND HE THREW THE CLUB WHILE SWINGING AND THE CLUB WOUND UP ON TOP OF A HOUSE. HE LOOKED SO DUMB AND NO LONGER HAD A SIX IRON."

"MY PUTTER IS SO SCRATCHED FROM KEEPING IT IN MY BAG NEXT TO MY IRONS. I MOVED IT TO BE WITH THE WOODS AND NOW I CAN'T FIND IT WITHOUT MOVING ALL THE WOODS AROUND."

I LOSE MY GOLF EQUIPMENT

"I LOST MY SAND WEDGE ON THE THIRD HOLE AND DIDN'T DISCOVER IT UNTIL I REACHED THE 18TH WHEN I NEEDED IT. I USED MY PITCHING WEDGE AND SCREWED UP THE SHOT AND LOST THE TOURNAMENT."

"I FELT LIKE AN ASSHOLE DRIVING ALL THE WAY BACK TO THE THIRD WHOLE TO RETRIEVE MY CLUB."

"I AM ALWAYS LOSING MY HEAD COVERS FOR MY WOODS AND HAVE TO BACK TRACK TO FIND THEM, OR HOPE THEY GET FOUND AND TURNED INTO THE PRO SHOP."

MY STUFF GOT STOLEN

"I ALWAYS LEAVE MY GOLD WATCH IN MY BAG WHEN I AM PLAYING. LAST TIME, I FORGOT IT WHEN I LEFT THE BAG AT THE GOLF CLUB. I PANICKED WHEN I GOT BACK HOME, CALLED THE CLUB AND IT WAS GONE!"

"I LOST MY SHOES WHEN I WAS PLAYING GOLF LAST YEAR AT A RESORT. THERE WAS NO SPECIAL PLACE FOR THE SHOES AND SO I JUST LEFT THEM WITH THE ATTENDANT AND THEY WERE NOT THERE THE NEXT DAY."

MY BAG IS A PAIN IN THE BUTT

"IT STARTED TO RAIN AND MY BAG FILLED UP WITH WATER. CAN YOU IMAGINE HAVING TO DUMP EVERYTHING OUT TO DRAIN THE WATER?" I LOST A BALL IN THE WATER AND RAN BACK TO MY BAG TO GET MY BALL RETRIEVER. I LOOKED EVERYWHERE AND COULDN'T FIND THE DAM THING. WOULD YOU BELIEVE IT HAD FALLEN ALL THE WAY DOWN AND WAS IMPOSSIBLE TO GET OUT!"

MY BAG GETS IN MY WAY

"I WAS WALKING THE COURSE AND GOING DOWN A HILL TO GET TO THE NEXT HOLE WHEN MY BAG & CART TOOK OFF AND ROLLED ALL THE WAY DOWN AND EVERYTHING FELL OUT. WHAT A MESS!"

"WE WERE LEAVING THE AIRPORT WITH OUR LUGGAGE AND OUR GOLF BAGS AND MY HUSBANDS BAG KEPT FALLING OFF THE CART AND SOMEONE TRIPPED ON IT."

"I DRIVE A MIATA AND HAVE TO PUT THE TOP DOWN IN ORDER TO CARRY MY WIFE AND MY GOLF BAGS. IT STARTED TO RAIN AND WE HAD TO PUT THE CLUBS IN THE CAR AND GET OUT OURSELVES. BOY DID WE LOOK STUPID STANDING ON THE SIDE OF THE ROAD NEXT TO OUR CAR."

"MY BAG IS MY BEST FRIEND. I HAVE HAD IT FOR 20 YEARS AND IT IS JUST ME."

GOLF IS BOTH TOUGH AND FRUSTRATING SO GOLFERS NEED ALL THE HELP THEY CAN GET

I AM CONFUSED

MY BAG IS CONFUSING

"I WAS RETURNING MY BUNCH OF CLUBS THAT I HAD JUST USED INTO THE BAG WHEN MY HUSBAND YELLED HURRY UP WE ARE HOLDING UP EVERYBODY. IT WAS SO EMBARRASSING TO BE YELLED AT ON THE COURSE."

"WHEN I GO SEARCHING FOR BALL MARKERS, TEES, AND REPAIR TOOLS AND ALL THE OTHER ACCESSORIES THEY ARE ALL IN THE BOTTOM OF THE BAG AND I HAVE TO DIG A WHOLE HANDFUL OF STUFF OUT TO FIND WHAT I AM LOOKING FOR."

"BAG HAS SO MANY COMPARTMENTS THAT I NEVER KNOW WHERE I PUT THE CHOCOLATE CANDY DROPS THAT I WANT."

"THE CART WAS ON THE SIDE OF THE HILL AND THE BREAK DIDN'T HOLD. THE CART CRASHED INTO THE TREES DOWN A RAVINE, BUT MY CLUBS WERE NOT AFFECTED."

Requirements Example Video



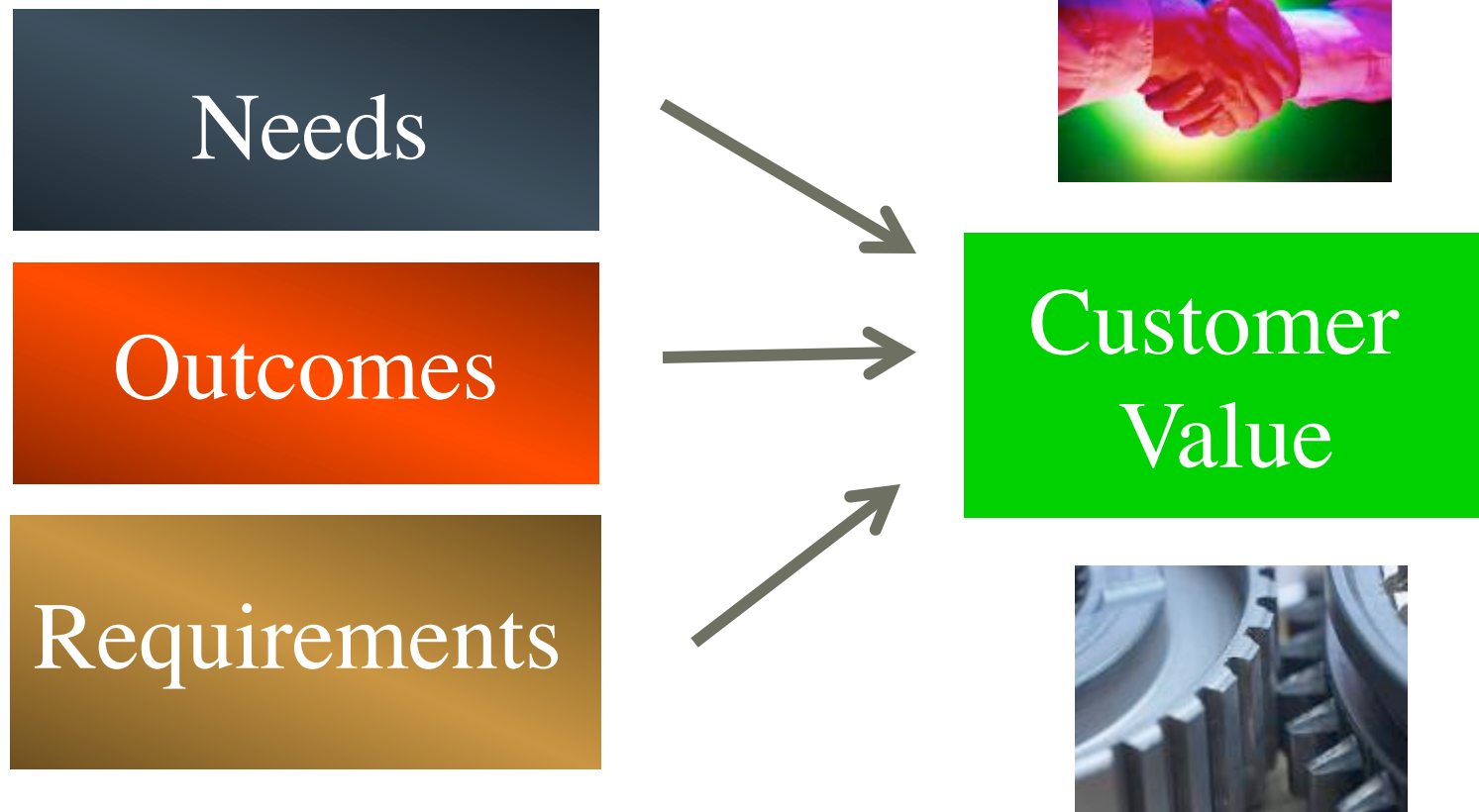
Create Requirements

Translate each problem in each transcript into multiple requirement statements



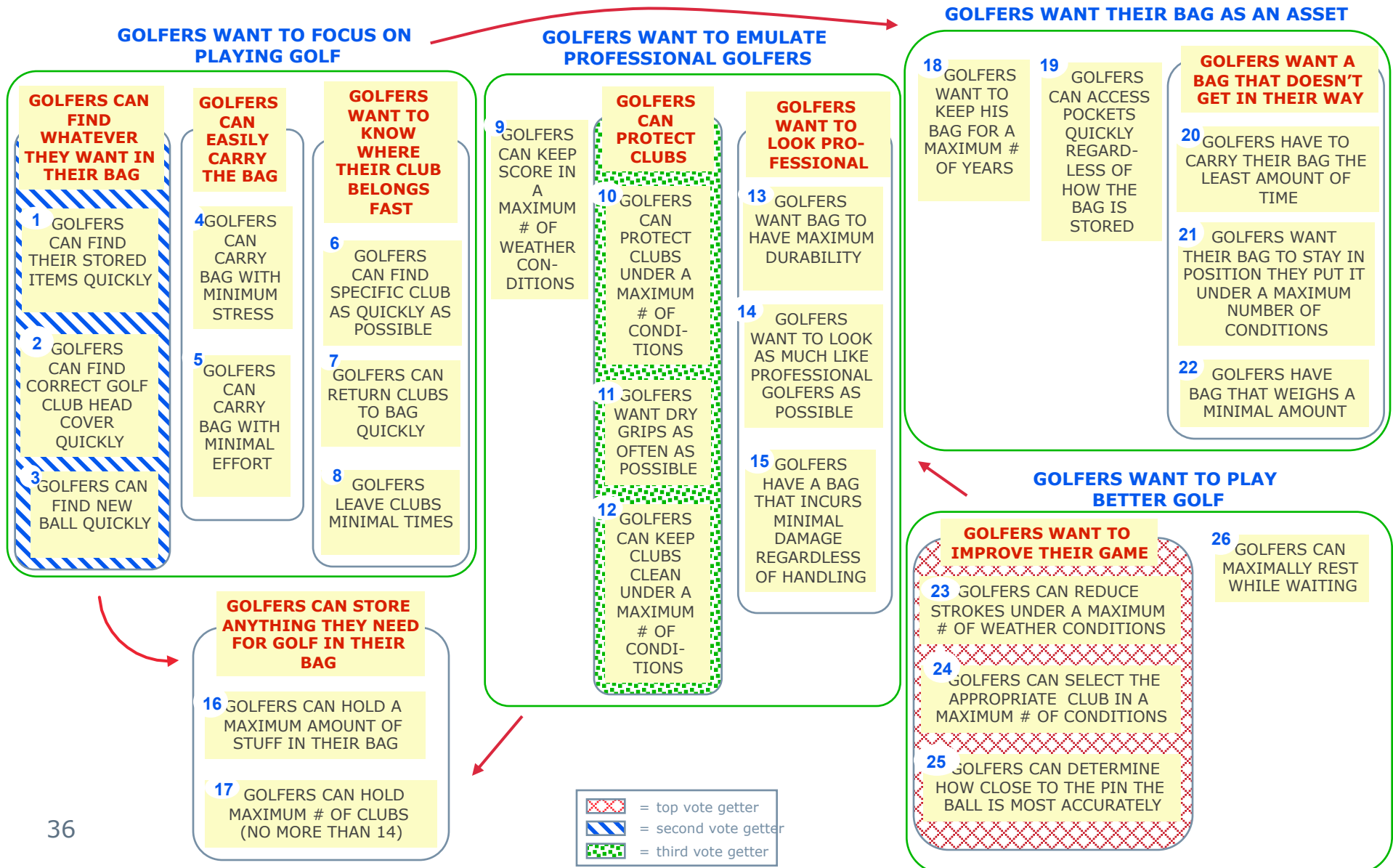
- No statement of means
- Avoid solutions - state the requirement or functionality
- Avoid abstract language
 - “Good, easily, comfortably, reliably, accurately” mean different things to different people
 - Must be actionable
- Use multi-valued language
- Describe what is scalable about the functionality
- Use language that implies a range of functionality

Call it What You Want



WHAT ARE THE KEY CUSTOMER REQUIREMENTS FOR A UNISEX GOLF BAG FOR THE MASS MARKET?

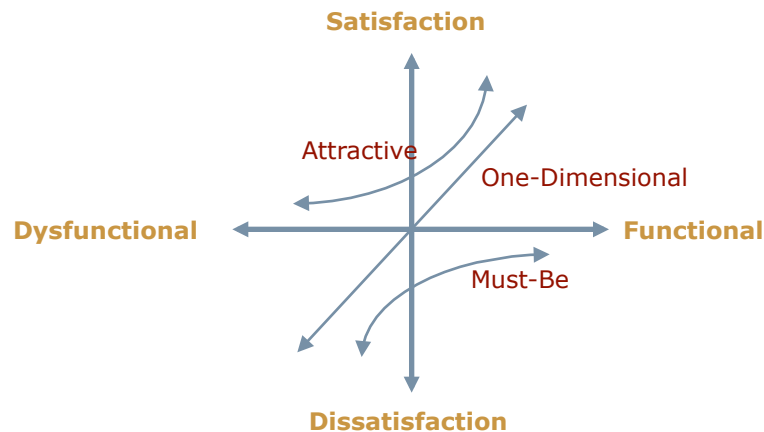
GOLFERS WANT THEIR BAG TO HELP THEM BE MORE SUCCESSFUL AND LESS STRESSED AT GOLF



Introduction to Survey



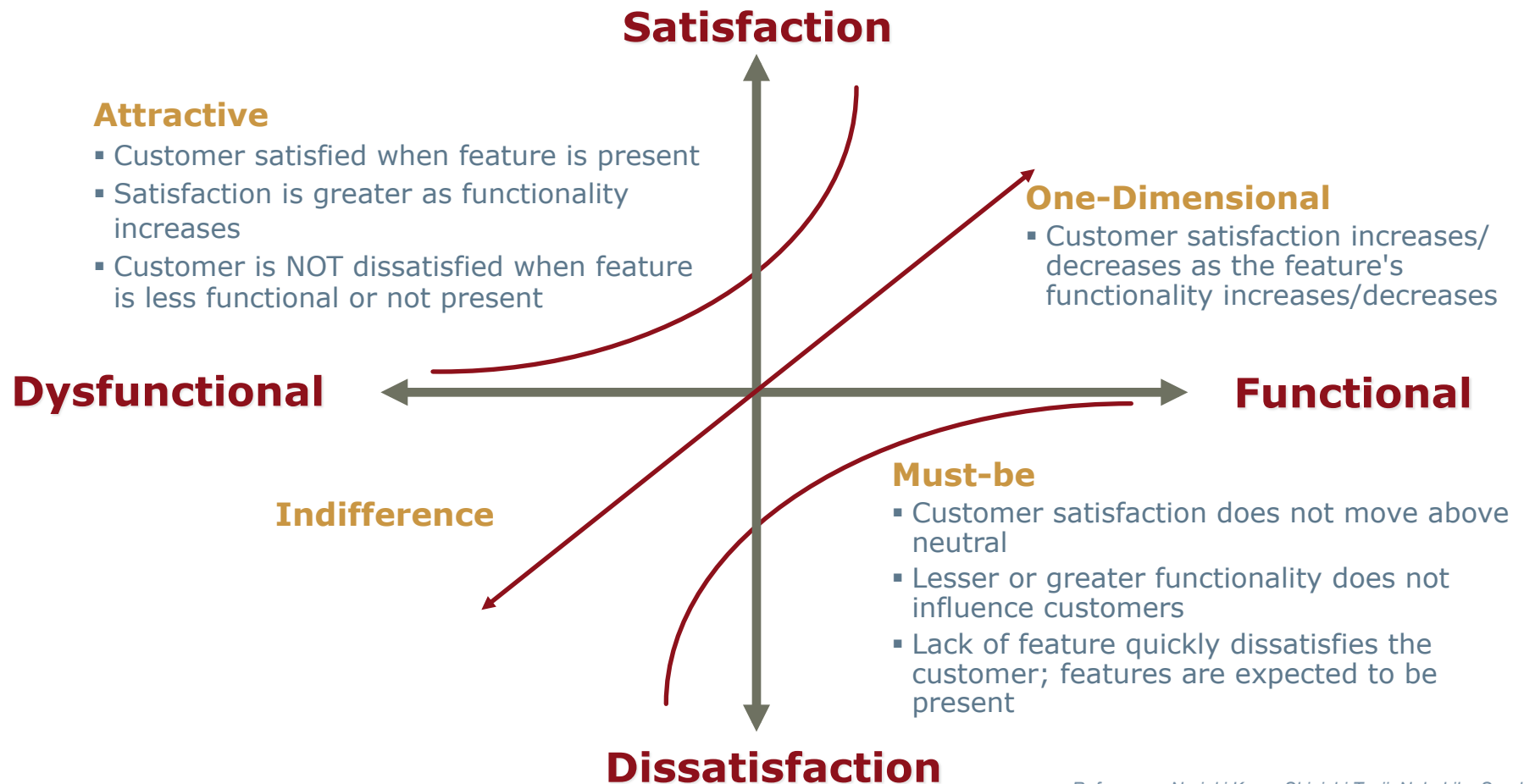
Select and Execute Ranking Method(s)



- Purpose:
 - To determine which requirements are essential, which are optional, and which would delight the customer
 - To prioritize among customer requirements
- Methods to choose from:
 - Create and compile data from importance questionnaire
 - Create and compile data from a Kano survey
- Benefit: Provides a fact-based means of making decisions that will result in a "winning" product
 - Most product development efforts are not able to implement all of the customer requirements

Requirement How important would it be if	Not at all important	Somewhat important	Important	Very important	Extremely important	Ranking
1. you had more places to hold cups in your car?					☒	2
2. you could hold different size cups in your car?		☒				
3. you could access your drink in your car from several positions?					☒	1

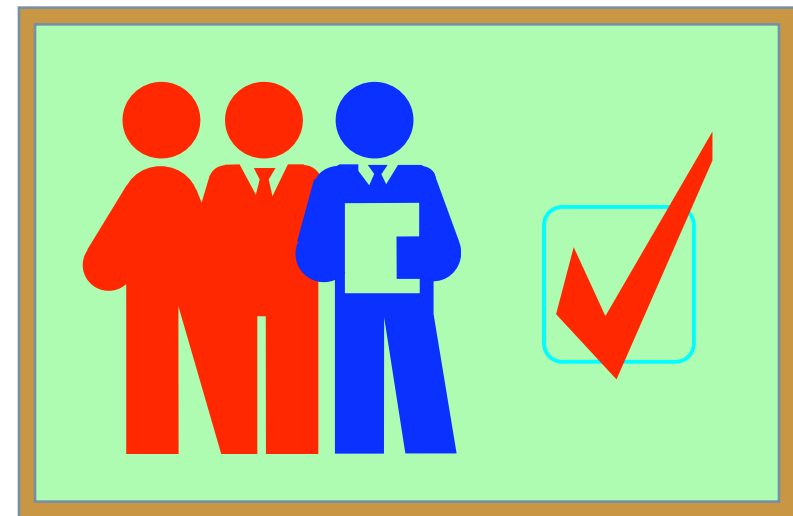
Results of a Kano Survey



Reference: Noriaki Kano, Shinichi Tsuji, Nobuhiko Seraku, and Fumio Takerhashi "Miryokuteki Hinshitsu To Atarimae Hinshitsu" ("Attractive Quality and Must-Be Quality"), *Quality*, JSQC 14(2) Tokyo, Japan, Society for Quality Control, 1984

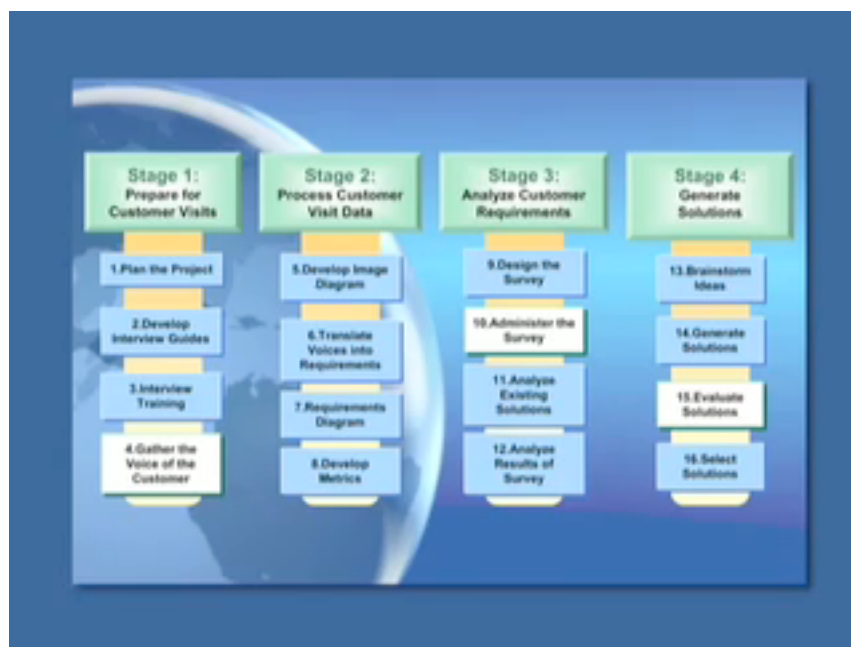
Summary

*From concepts
and images.....*



*....to prioritized, measurable,
validated customer
requirements*

Idea Brainstorming Example

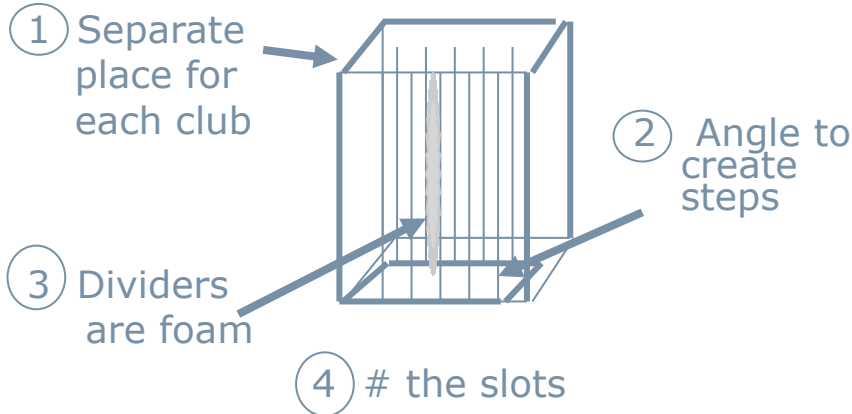


Idea Generation Overview



- Participants document their own ideas on a flip chart
- Draw if possible, don't write!
- This is brainstorming!
 - Avoid criticism by requiring each participant to say "That's a good idea!" following each offering
- Unconstrained thinking
 - Group brainstorming involving the team and outside experts
- Structured reflection
 - Team assessment of ideas based on criteria of validity and feasibility

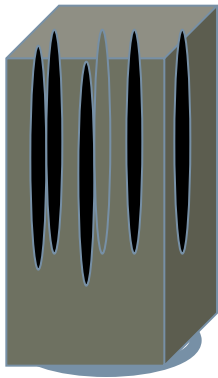
Generating Ideas for Each Customer Requirement

V	F	Idea	
H	H	1	
H	H	2	
L		3	
M	H	4	
H	H	5	

V = Validity; F = Feasibility

Generating Concepts: Golf Example - Partial List of Features

- Combine ideas together to create potential solutions



- Bag is rectangular (pockets on three sides for easy access when on golf cart) (1/19.10)
- Individual fastening on the bag for head covers to attach (prevent loss) (2.14)
- Small Personal Digital Assistant to collect and display club usage per distance, record scores, and putts (play better golf) (24.3)
- Tubes for each club to maintain separation for easy entry and exit (clubs fowling in bag) (7.1)
- Each tube is identified with club number (quickly identify clubs and missing ones) (6/8.18)



Thank You

**More on Customer Value Driven
Strategy and Product Development at
www.pdcinc.com**

**Contact Sheila Mello at
smello@pdcinc.com**

