



# Identifying Customer Needs



# Goals

- Ensure that the product is focused on customer need
- Identify latent or hidden needs
- Provide a fact base for justifying the product spec
- Create an archival record of the needs activity
- Ensure that no critical need is missed
- Develop a common understanding of customer need

# Customer Needs Process

- Define the Scope
  - Mission Statement
- Gather Raw Data
  - Interviews
  - Focus Groups
  - Observation
- Interpret Raw Data
  - Need Statements
- Organize the Needs
  - Hierarchy
- Establish Importance
  - Surveys
  - Quantified Needs
- Reflect on the Process
  - Continuous Improvement



# Gather Raw Data

- Interviews : discuss needs with a customer
- Focus Groups :
  - A moderator facilitates a discussion with a group of customers
  - Typically conducted in a special room equipped with a two-way mirror allowing several members of the development team to observe the group



# Gather Raw Data

- Observing the product in use :  
watching customers use an existing product or perform a task for which a new product is intended can reveal important details about customer needs

# Choosing Customers

## ■ Lead Users :

- Often able to articulate their emerging needs, because they have had to struggle with the inadequacies of existing products
- They may have already invented solutions to meet their needs

# Choosing Customers

- Extreme Users :
  - Those who use the product in unusual ways or who have special needs → Good Grips peeler develop in response to arthritis users
- Several groups of people can be considered “the customer”



# Hints for effective interactions with customers

- Go with the flow
- Use visual stimuli
- Suppress preconceived hypotheses about the product technology
- Have the customer demonstrate the product and/or typical tasks related to the product
- Be alert for surprises
- Watch for nonverbal information





# Documenting Interactions with Customers

- Audio recording
- Notes
- Video recording
- Still photography



# Interpret Raw Data in Terms of Customer Needs

- Customer needs are expressed as written statements and are the result of interpreting the need underlying the raw data gathered from the customers

# Interpret Raw Data in Terms of Customer Needs

- Express the needs in term of *what the product has to do*, not in term of *how it might do it*
- Express the needs as specifically as the raw data
- Use positive, not negative, phrasing
- Express the need as an attribute of the product
- Avoid the word *must* and *should*


# Interpret Raw Data in Terms of Customer Needs

<b>Guideline</b>	<b>Customer Statement</b>	<b>Need Statement-<u>Wrong</u></b>	<b>Need Statement-<u>Right</u></b>
<b><u>What Not How</u></b>	“Why don’t you put protective shields around the battery contacts?”	The screwdriver battery contacts are covered by a plastic sliding door.	The screwdriver battery is protected from accidental shorting.
<b>Specificity</b>	“I drop my screwdriver all the time.”	The screwdriver is rugged.	The screwdriver operates normally after repeated dropping.
<b>Positive Not Negative</b>	“It doesn’t matter if it’s raining, I still need to work outside on Saturdays.”	The screwdriver is not disabled by the rain.	The screwdriver operates normally in the rain.
<b>Attribute of the Product</b>	“I’d like to charge my battery from my cigarette lighter.”	An automobile cigarette lighter adapter can charge the screwdriver battery.	The screwdriver battery can be charged from an automobile cigarette lighter.
<b>Avoid “Must” and “Should</b>	“I hate it when I don’t know how much juice is left in the batteries of my cordless tools.”	The screwdriver should provide an indication of the energy level of the battery.	The screwdriver provides an indication of the energy level of the battery.



# Organize the Needs into a Hierarchy

- Large number of detailed needs is awkward to work with and difficult to summarize for use in subsequent development activities → needs organize



# Organize the Needs into a Hierarchy

- Write each need statement
- Eliminate redundant statements
- Group the cards according to the similarity of the needs they express
- Choose a label for each group
- Review

# Organize the Needs into a Hierarchy

- The SD power is convenient:
  - The SD is easy to recharge
  - The SD can be used while recharging
  - The SD recharges quickly
  - The SD batteries are ready to use when new
- The SD lasts a long time
  - The SD tip survives heavy use
  - The SD can be hammered
  - The SD can be dropped from a ladder without damage
- The SD is easy to store
  - The SD fits in a toolbox easily
  - The SD can be charge while in storage
  - The SD resists corrosion when left outside or in damp places



# Establish the Relative Importance of the Needs

- Relying on the consensus of the team members based on their experience with customers
- Importance assessment on further customer surveys





# Reflect on the Results and the Process

- How might we improve the process in future efforts ?

# Needs Translation Exercise:

"Saya sering bepergian, membawa sikat gigi sering merepotkan"

"Laptop ini berat sekali, saya kesulitan membawanya"

"Tas ini sangat berharga, saya pasti kesulitan jika tas ini sampai hilang"

"Saya tidak sempat membayar listrik"

# Needs Translation Exercise:

## Customer statement

“Saya sering bepergian, membawa sikat gigi sering merepotkan”

“Laptop ini berat sekali, saya kesulitan membawanya”

“Tas ini sangat berharga, saya pasti kesulitan jika tas ini sampai hilang”

“Saya tidak sempat membayar listrik”

## Translated customer needs statement

Sikat gigi mudah dibawa dalam perjalanan

Laptop ringan

Tas tidak mudah hilang  
Tas mudah ditemukan ketika “hilang”

Pembayaran listrik yang praktis



*THANK YOU*