

# Translating Customer Needs

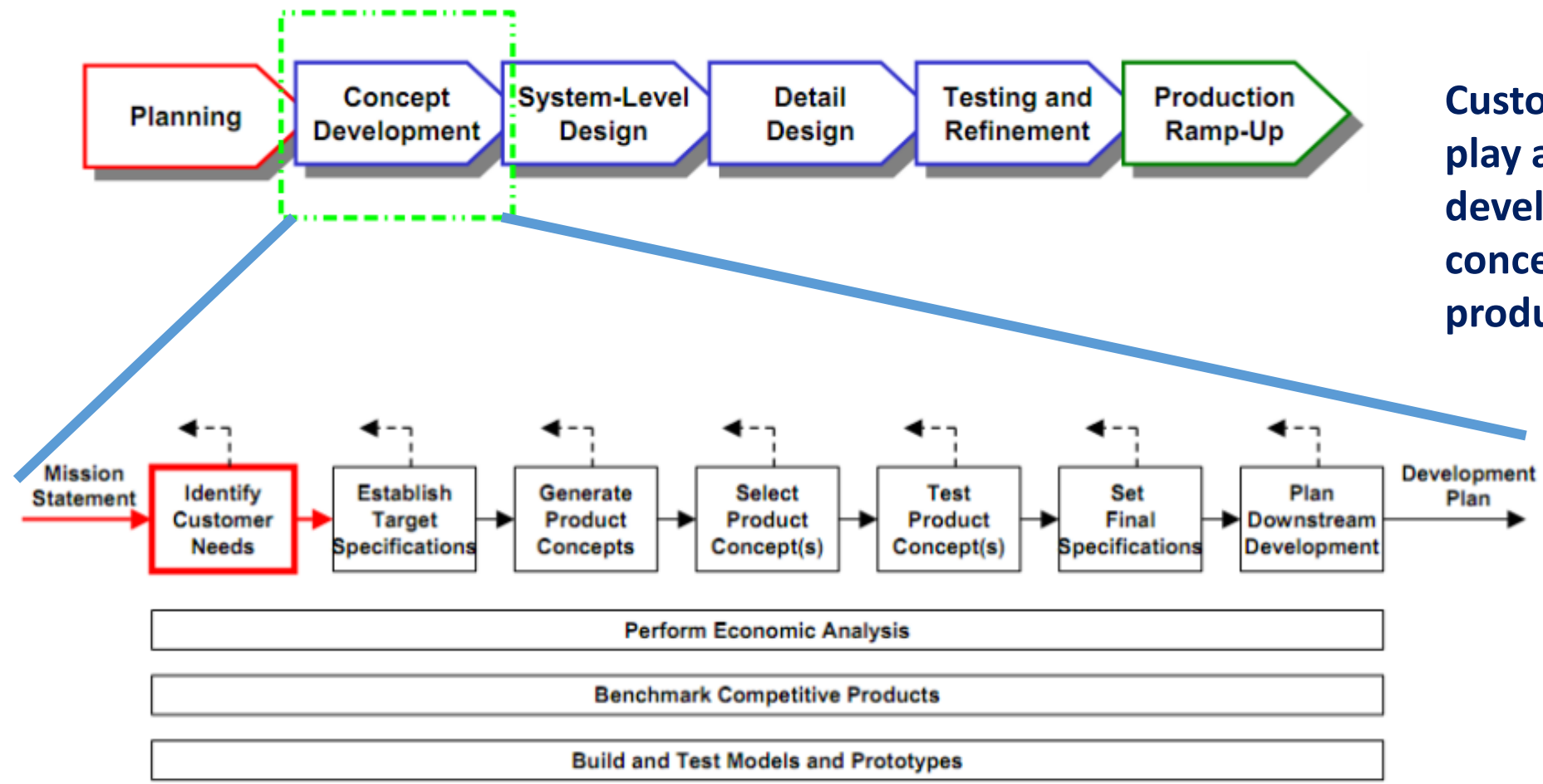
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# Generic Product development Process



Customer needs play a vital role in developing concepts for the product

# Four steps for translating customer need

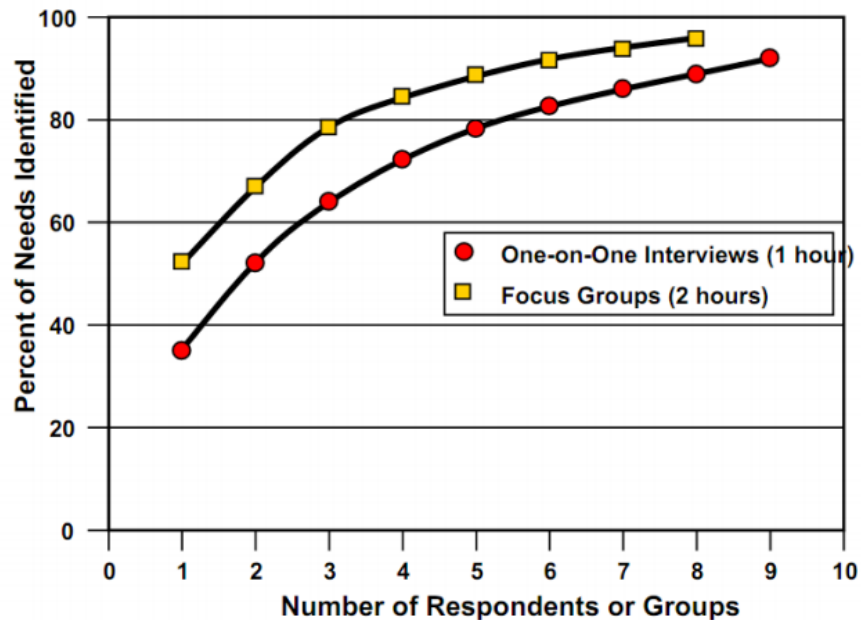
1. **Gather** raw data from customers
2. **Interpret** the raw data in terms of customer needs
3. **Organize** the needs into a hierarchy of primary, secondary, and (if necessary) tertiary needs
4. **Establish** the relative importance of the needs

# Step 1 : Gather raw data from users

**Interview:** 1~ 2 hour/person

**Focus Group:** A moderator facilitates a two-hour discussion with a group of 8 – 12 customers.

**Observing the product in use:** Watching customer use and existing product or perform a task for which a new product is intended.



**A qualitative study graph showing that more needs can be extracted from the user if a focus group interact with the customer/user rather than one to one interaction**

# Interview Questions : Case study of tea plucker

1. When and why do you use this type of product ?
2. Walk us through a typical session using the product
3. What do you like about the existing products ?
4. What do you dislike about the existing product ?
5. What issues do you consider when purchasing the product ?
6. What improvements would you make to the product ?



**Small Tea Leaf Plucker**

# User / Customer response

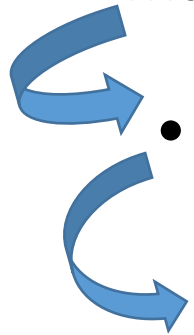
Question	Customer statement	Interpreted Need
<b>Typical Uses</b>	We need to pluck tea leaves fast	Device pluck leaves faster than hands
	Leaves are in better shape when cut through this device	Cutting quality of a potable cutter is better than that of hand or hand tool
<b>Likes of this device</b>	I like the smallness of the device	Portability of the device is a factor when a worker has to carry it around
	Like the single button control	User can understand the simple control method.
<b>Dislikes of this device</b>	Grip is very awkward	A comfortable grip is needed
	We have to carry charger every where	Battery efficiency of the device need to be worked upon
<b>Suggested Improvements</b>	Allow us use this device in any weather	The device should sustain all weather climate of India
	It would be nice is collection scoop is bigger	The scoop of leaves fills fast and needed to be collected into the basket

# Step 2 : Interpret Raw Data in terms of customer need

Guideline	Customer Statement	Need Statement-Wrong	Need Statement- Right
What, not How	Why don't you create pistol shape handle for gripping	A pistol shape handle is more catchy to the user	Ergonomically holding a tool in certain ways is better than the others
Specificity	I keep dropping the tea plucker	The plucker is rugged	The plucker operates normally after repeated dropping
Positive Not Negative	"It doesn't matter if it's dense fog, I still need to work outside "	The device is not disabled by fog	The tea plucker operates normally in a foggy season
Attribute of the product	"I would like to charge this plucker from sunlight"	A solar panel can charge the plucking tool	The tea plucker battery can be charged from a solar panel

# Step 3 : Organize the needs into a hierarchy

- Organize the needs into a hierarchy of primary, secondary, and (if necessary) tertiary needs
- A single need can be dissected into some more basic needs
- For example :
- Making a tea plucker potable is a primary need



- Use of solar power to power that device is secondary need
- Using motors of such energy rating that can work with battery stored energy is a tertiary need



# Step 4 : Establish the relative importance of the needs

- Create a Need Matrix to prioritize the needs that are needed to be addressed by the designers
- The scale can be qualitative or quantitative or both
- Use numbers for weightage(usually 1-5) , where 1 being the least important and 5 be the item of highest priority

Customer Need	Importance (1-5)
Potable battery charging	4
Increase the scoop size	3
Change the handle orientation to eliminate/ reduce fatigue	5
Make the device all weather	2

# Conclusion

- Ensure that the product is focused on customer needs
- Identify latent or hidden needs as well as explicit needs
- Provide a fact base for justifying the product spec.
- Create an archival record of the needs activity of the development process
- Ensure that no critical customer need is missed or forgotten
- Develop a common understanding of customer needs among members of the development team

**Thank you**