









**Cheetos**



**Cheetos**

CHEESE  
FLAVORED  
LIP BALM

Net Wt. 4.5g / 0.16oz



**LIP BALM**

Net Wt. 4.5g / 0.16oz





# Learning never looked so good!

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Bigger Hard-Drive!  
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**INCLUDED! 20 Software Titles worth over \$500!** † Average retail price. Retail package not included.

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**Faster Processor!  
Bigger Hard-Drive!  
More Memory!**

**INCLUDED!  
Hot Wheels™  
Steering Wheel  
and Pedals!**



Hot Wheels



All for only

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[www.hotwheelspc.com](http://www.hotwheelspc.com)

# Introduction







How the customer explained it



How the engineer designed it



What the customer really needed

# Identifying Customer Needs



**Umair Muhammad, Stefanos Zafiris, Totti Berg, Arkar Nan Htike & Anni-Elina Seipäjärvi**

# Identifying Customer Needs

- 1. Gather Raw Data from Customers**
- 2. Interpret Raw Data in Terms of Customer Needs**
- 3. Organize the Needs into a Hierarchy**
- 4. Establish the Relative Importance of the Needs**
- 5. Reflect on the Results and the Process**

# Step 1

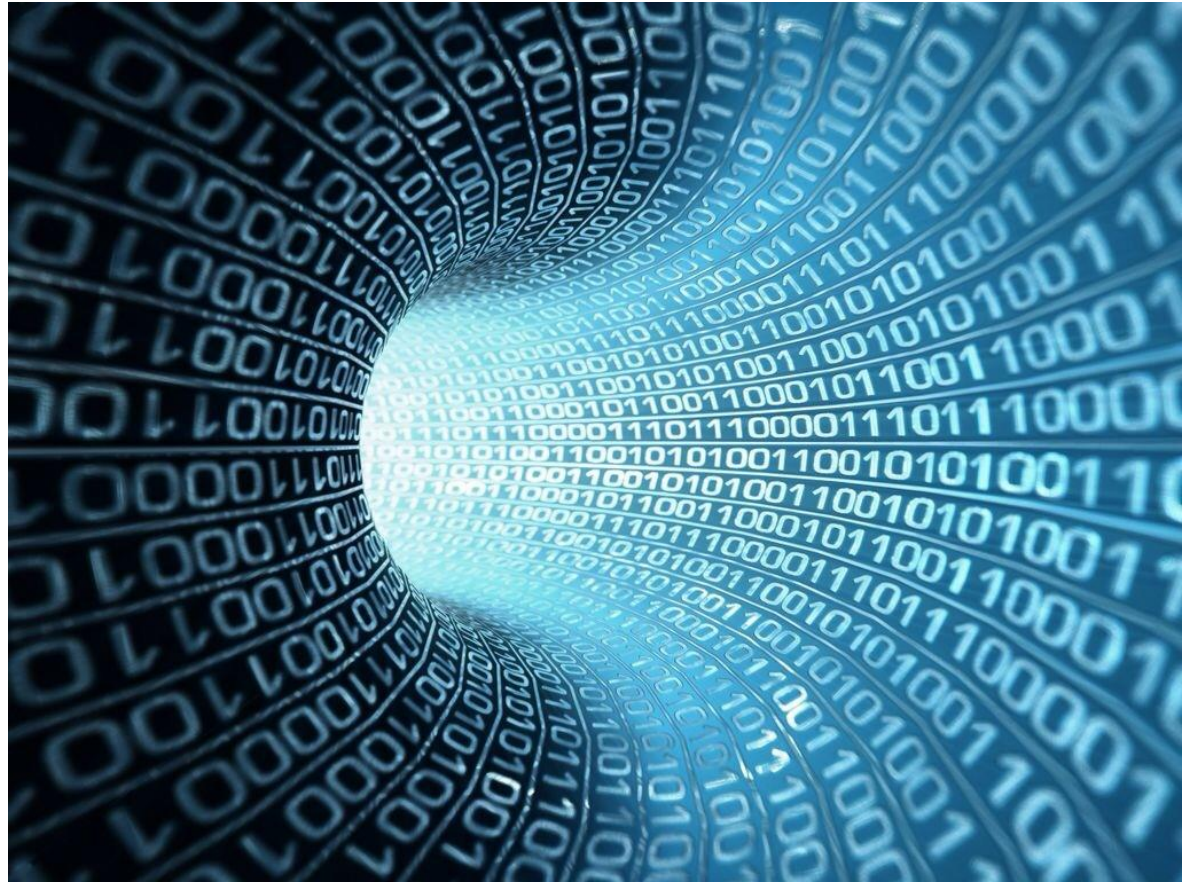
## Gathering Raw Data From Customers





Aalto University

# What is data?



# Step 1

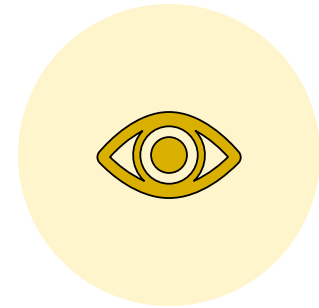
## Most commonly used methods



**INTERVIEWS**



**FOCUS  
GROUPS**



**OBSERVATION**

# Step 1

## Other methods



**SURVEYS AND  
FORMS**



**OBSERVING THE  
COMPETITORS**



**OBSERVING THE  
MARKET TRENDS**

# Step 1

## Choosing customers





# Step 1

## Challenges in gathering raw data



Do you listen to the customer or the end user?



How do we know if the data is still valid in 2 years time?



Communication problems


# Step 2

## Interpreting Raw Data for Customer Needs

- **Looking at customer feedback vs Sales**
- **Data being interpreted from different angles**
- **Important to only interpret raw data**

# Example



 Steve

★☆☆☆☆ ... you can sit on the toilet and lean back comfortably. What a disappointment when our plumber came to ...

Reviewed in the United States on November 7, 2015

Verified Purchase

I'm only giving this toilet a 1\* because you can sit on the toilet and lean back comfortably. What a disappointment when our plumber came to install our Toto and frowned when he saw the brand. His first comment was the difficulty in finding parts. I have to clean the toilet after almost every BM. It doesn't completely flush as it is highly advertised. We researched many toilets before we decided on the Toto because it would "flush clean" with the cyclone flush. Another problem, Ring Around the Toilet". No way to get it off w/o scrubbing or using a razor blade. This will ruin the finish.

27 people found this helpful

Helpful

Report abuse

★☆☆☆☆ **Less than perfect for me**

Reviewed in the United States on June 26, 2017

Verified Purchase

Not as happy with this model as other Toto's I've used. For only using less than a gallon of water it seems like it has a long fill time and is noisy on the filling process also. Then there is a bit of water hammer when the fill shuts off even though the house system has a air bladder to prevent that. And the real drawback is for the guys. The big boys on a warm summer's day tend to go for a dip when seated. Not cool. Our Kohler toilets have a 6" seat to waterline distance. With the seat that comes with this toilet the distance isn't even 5 1/2". I'll check into aftermarket seats to see if there is a slightly higher one out there, but for close to \$500, this thing should be closer to perfection, in my opinion. On the positive side, I haven't been able to clog it. And oh, BTW, when you unbox it, do your best not to destroy the box. The first one arrived broken at the base, but we had totally trashed the box before we saw that. We were gentler on the replacement box/toilet Amazon sent so the broken one could be returned.

39 people found this helpful

Helpful

Report abuse

 JWH

★★★★★ **Both new ones are still in the box but we love the one we bought a couple years ago.**

Reviewed in the United States on August 13, 2022

Verified Purchase

Wouldn't own any toilet except a Toto. Best toilets ever.

Helpful

Report abuse

# Customer needs → Raw Data → Product feature

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Rare spare parts.

Repairing is versatile.

Doesn't flush fully.

Option to fully flush.

Long refill time.

Refill accelerate option.

Bad packaging.

Detailed instructions on the package.





# Categorize the Needs

## Example: chainsaw (= CS)

**The CS power output is enough**

Sawin with the CS must be faster than by hand \*\*\*

The CS maintains power for several hours of use \*

The CS must be able to cut wood \*\*\*

**The CS power usage is convenient**

The CS is easy to recharge\*\*

The CS recharges quickly \*

The CS must be wireless \*

**The CS is easy to store**

The CS comes with a plastic chain cover \*\*

The CS does not break down in wet conditions \*\*\*

The CS withstands corrosion \*\*

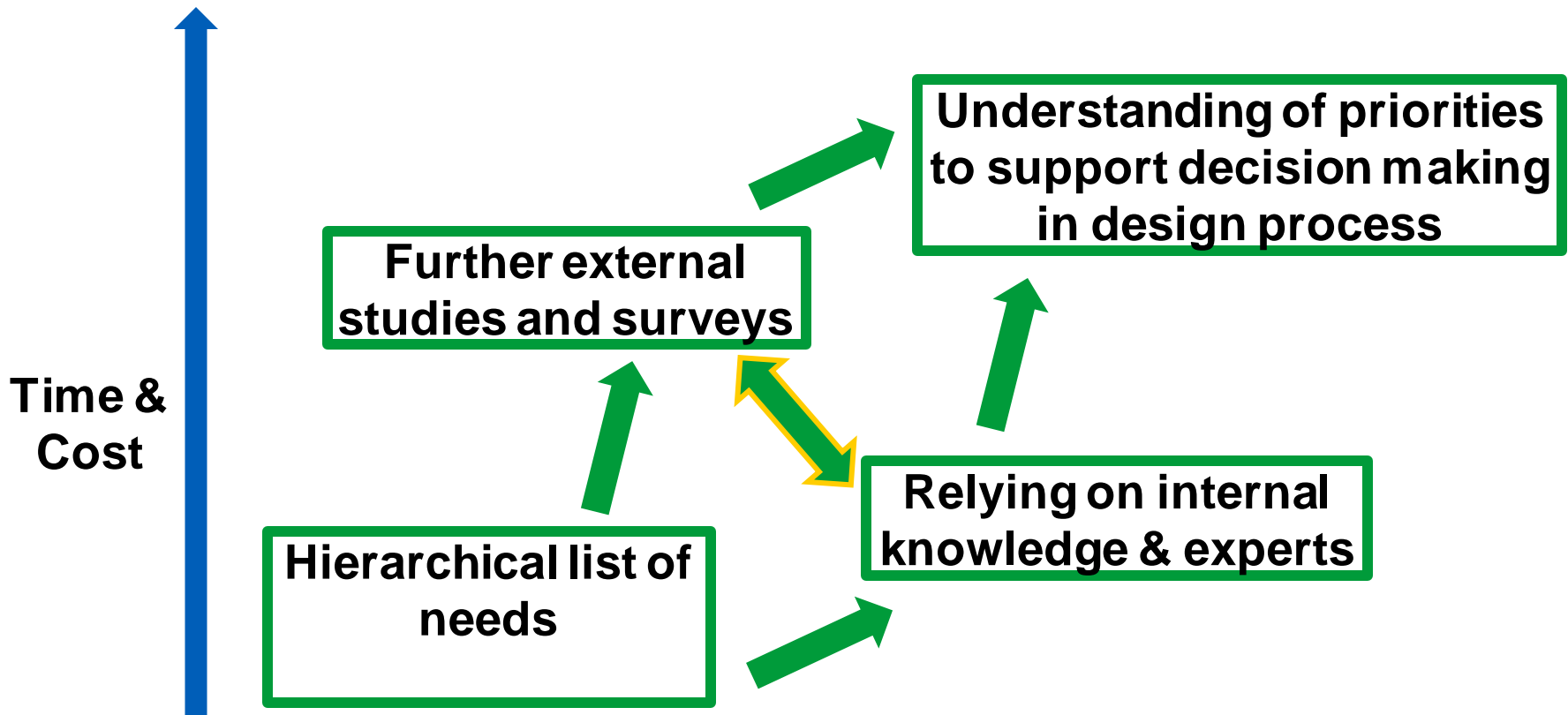
The number of \*'s indicates the importance of the need





# Step 4

## Establish the Relative Importance of the Needs



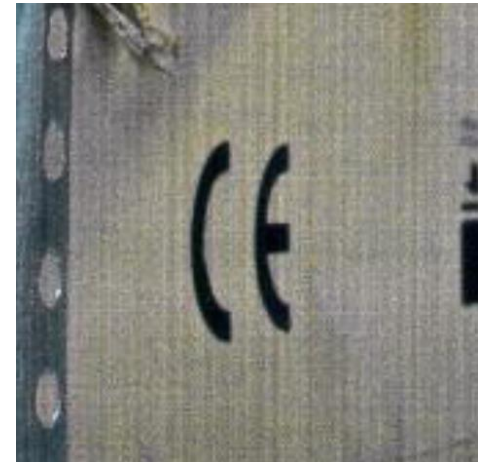
# Step 4

## Mandatory requirements

### Customer expectations vs. Needs

#### Legal aspects:

- Regulations (emission, certain working hours, bear certain operating conditions)
- Safety (CE)



Source: Manner, Timo

# Step 4

## Studying requirement frequency

How important?

Customer experience of Kone elevator XYZ	1	2	3	4	5
Speed			X		
End dampening				X	
Easiness of use				X	
Noise level					X
Lighting		X			

\* X =

Rated as  
4 or 5

Speed \* 20  
Noise level \* 18  
Easiness of use \* 15

# Step 4

## Studying product feedback



Customer experience of Kone elevator XYZ	1	2	3	4	5
Speed			X		
End dampening				X	
Easiness of use				X	
Noise level					X
Lighting		X			
Compared to: Otis elevator ABC					

\* X =

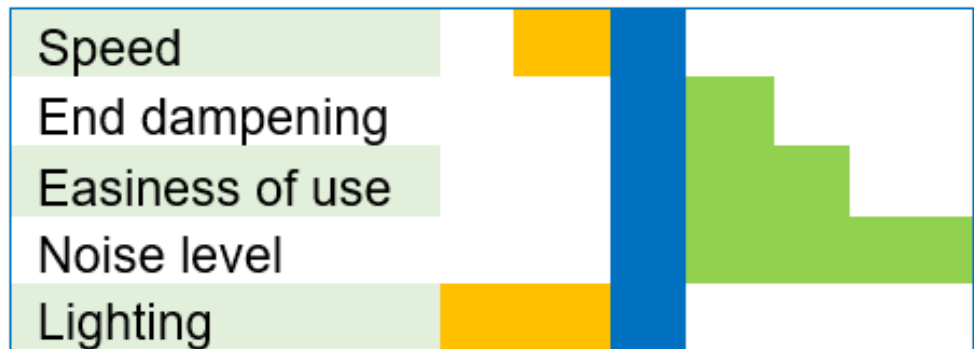
Top 3 negatives (rated 1)	Top 3 positives (rated 5)
Lightning * 6 Speed * 1	Easiness to use * 9 Noise level * 7 End dampening * 4

# Step 4

## Studying requirement severity

- Mean value of each requirement
- Standard deviation
- Range of values

Negative – Neutral – Positive



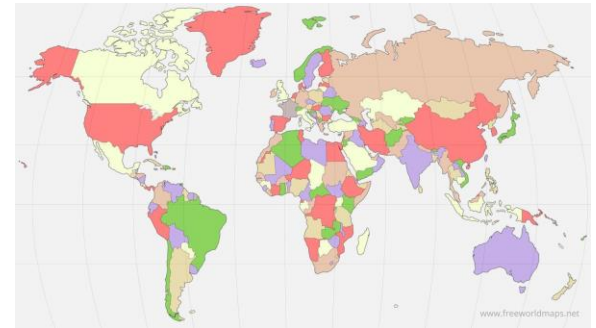
# Step 4

## Studying requirement details

- **Market area differences**
- **Contradictions**
  - speed vs. dampening feeling, cannot aim to either extreme
- **Further studies: e.g. Conjoint analysis**

**Note: Very case specific study**

**New product vs. Next product in series**



[www.freeworldmaps.net](http://www.freeworldmaps.net)

# Step 5

## Reflect on the Results and the Process

Have all type of customers been interviewed?

Do any customers require follow-up interviews?

Are any of the needs surprising?

More/Less interviews/focus groups?

Should you have used different method?

Could the process have been done faster?



# Exercise – Customer Needs for Food

## 1. And 2. Gather and interpret the Data

### The food needs to:

Include no Animal Suffering

Be Cheap

Look Delicious

Have Low CO2 Footprint

Contain no Child Labour

Have a Tasty Texture

Taste Delicious

Contain Vitamins

Contain Minerals

Be Healthy

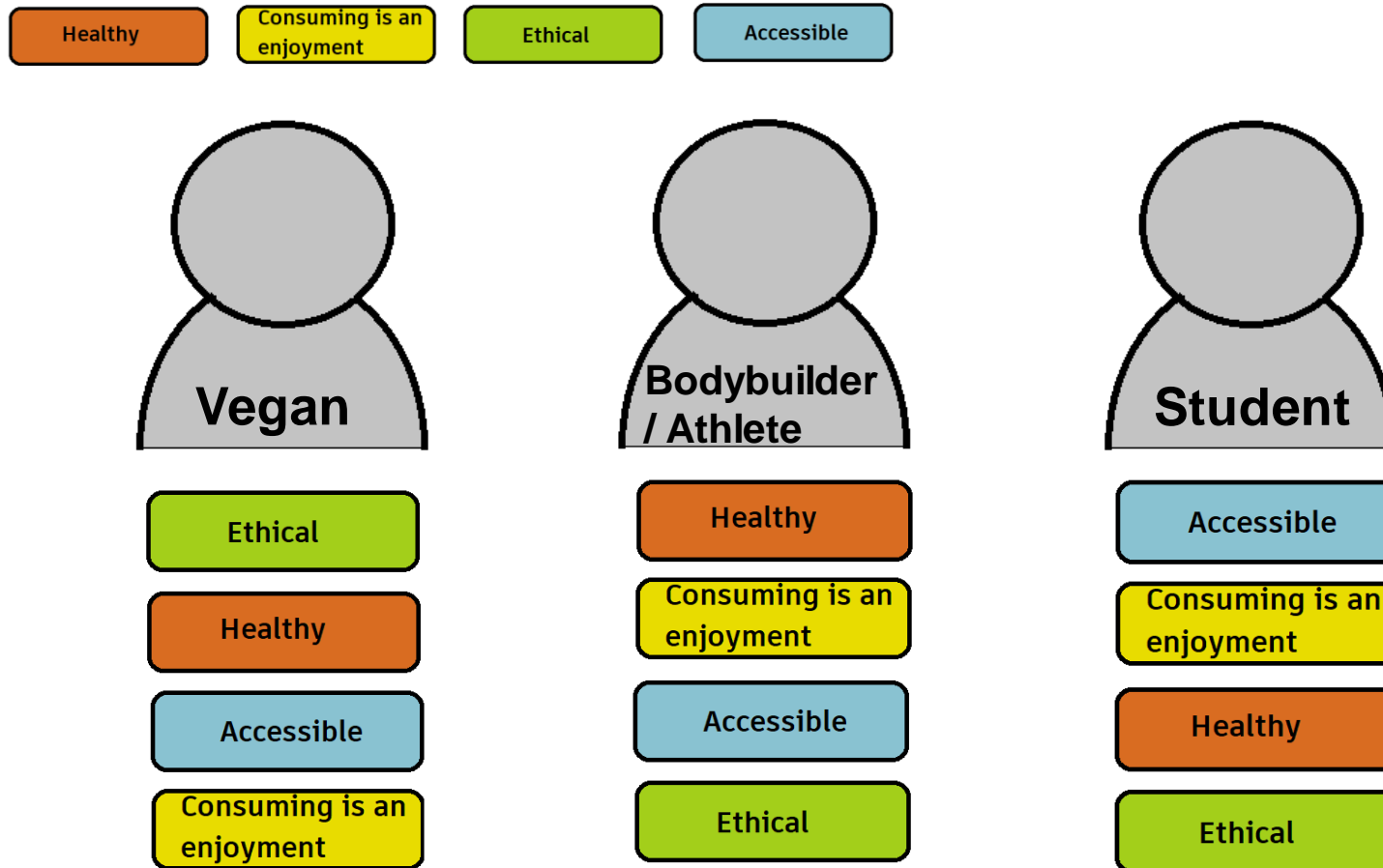
# Exercise – Customer Needs for Food

## 3. Organize the Data

Healthy	Consuming is an enjoyment	Ethical	Accessible
Sugarfree	Tastes Delicious	No Animal Suffering	Easy to Make
Vitamines	Tasty Texture	No Child Labour	Low Cost
Minerals	Echough Spices	Local	Incredients Can Be Found From a Local Market
Plant-Based Fats	Looks Delicious	Low CO2 Footprint	

# Exercise – Customer Needs for Food

## 4. Establish the relative importance



# Sources:

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**Questions?**