

Connecting Together for a Safer, Smarter World

Risk identification and risk communication

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Electrical Product Safety Conference 2016

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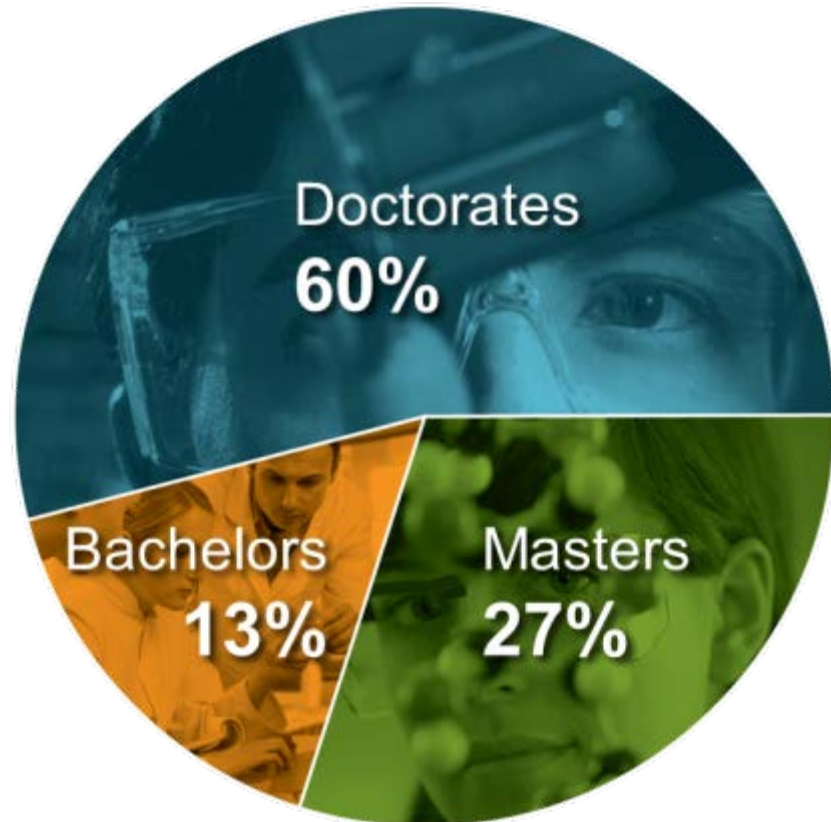


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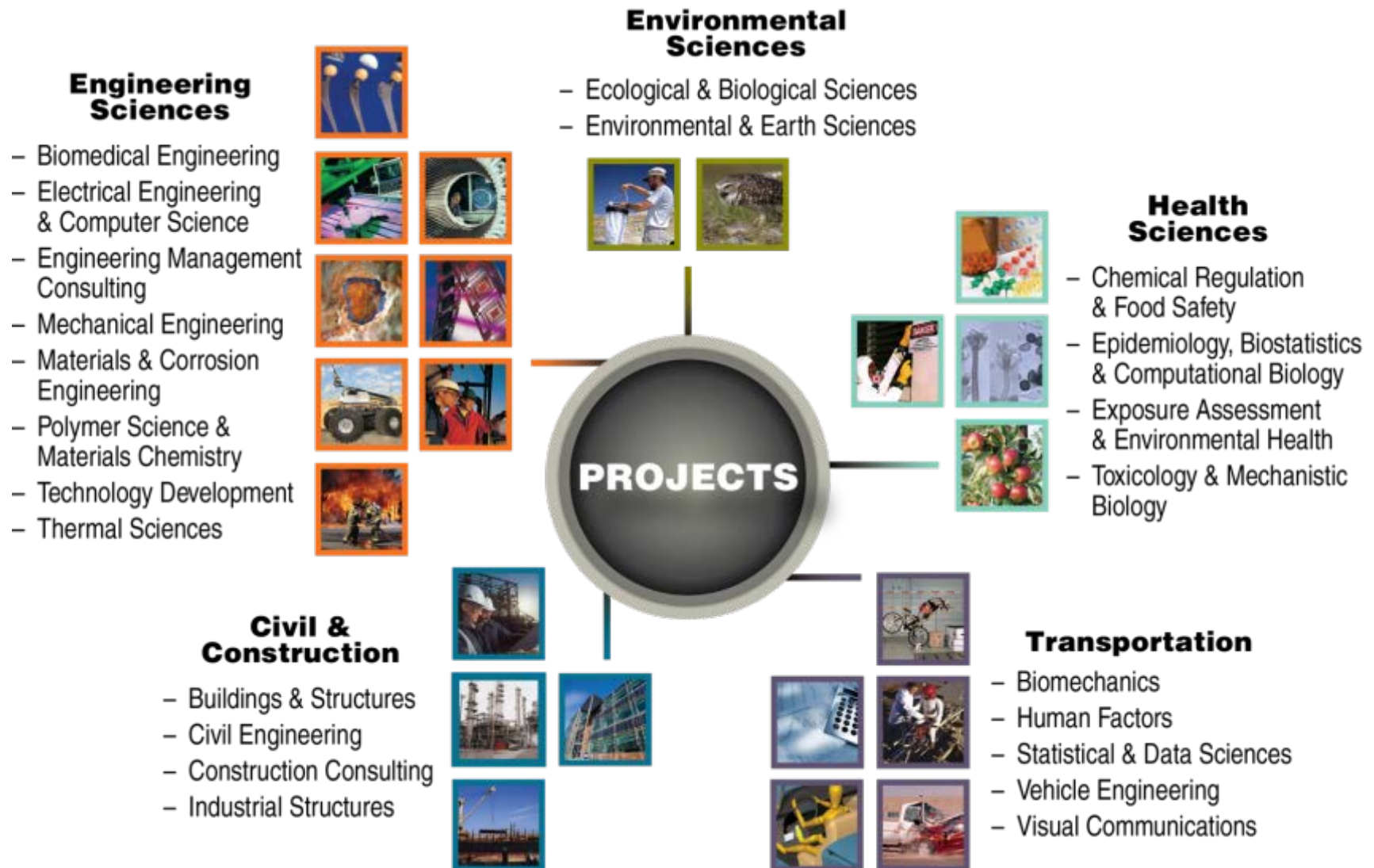
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Agenda

- **Introduce Risk** – what are we identifying and communicating about?
- **Foreseeable Use** – who are we communicating to?
- **Warnings and Instructions** – how are we communicating?
- **Registration** – How are we communicating and connecting, and how effective is it?
- **Product Recall** – how does communication with the consumer to help manage recall risk?
- **Panel Discussion** – how do we move forward?

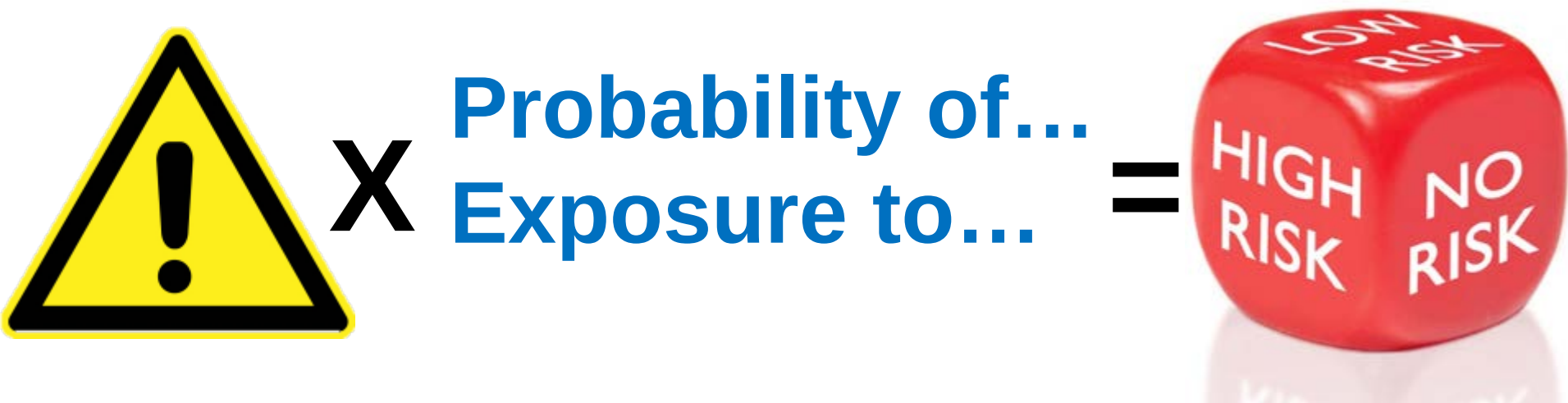
What is Risk?



What is Risk?



Risk Equation



Risk Management, Basic Approach

Design out the hazard to eliminate risk


$$\text{X} \begin{matrix} \text{Probability of...} \\ \text{Exposure to...} \end{matrix} =$$


Risk Management, Basic Approach

Is this easy to do?

NO!

- Inherent Risks
- Residual Risks
- Unexpected Risks

Accidents Happen



Identification and Communication

- Aim to influence the Probability/Exposure side of the Risk Equation
- Identifying and communicating risk to help influence consumer behaviour

Foreseeable Use



Who is the consumer ...

... and why do we do what we do?

- People are driven to use products and do things which keep them interested
- Drive to optimize their stimulation, i.e.,
 - Avoid boredom
 - Avoid pain
 - Make our lives easier

Intended Use vs Misuse: Reasonable Foreseeable Use



Intended Use vs Misuse: Reasonable Foreseeable Use



Fit for purpose

Thoughts when we purchase a product:

- We buy a product for a purpose or a function
- It will DO something FOR us
- It will make our lives easier or better

1st step: What is it for?

- What is the intended use of the product?
- Is it obvious to the consumer?
- Are you sure?

- Can the intended use be corrupted?

Example of mobile phone



Example of cruise control



Example of two together



Extreme example



Smart Kitchen Example



Think about Risk and Exposure

- Critical Path to Injury



- How can we influence consumers at each step, not just advise on intended use?

What do you do with this?



How to use your vote pads



1. Make your choice
2. Press C, to cancel or,
3. Press “OK” to validate.



What did you have for breakfast?

1 - cereal

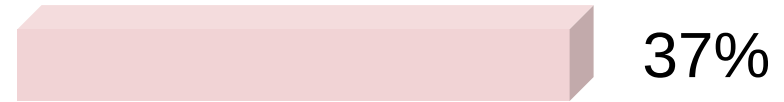
2 - toast

3 - brexit

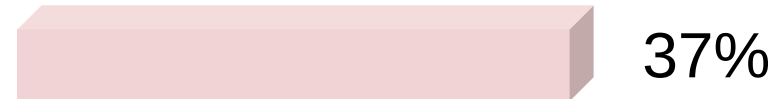


What did you have for breakfast?

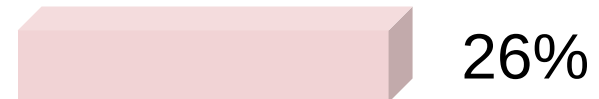
1 - cereal



2 - toast



3 - brexit





Did you understand all of the features?

- 1 - Yes, I understood ALL of the features
- 2 - No, I did not understand ALL of the features?

Think about electronic products you have purchased over the years, and answer HONESTLY

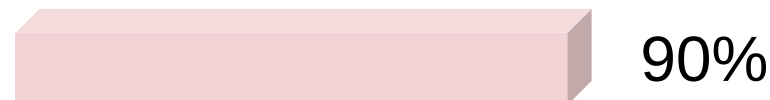


Did you understand all of the features?

1 - Yes, I understood ALL
of the features



2 - No, I did not understand ALL
of the features?

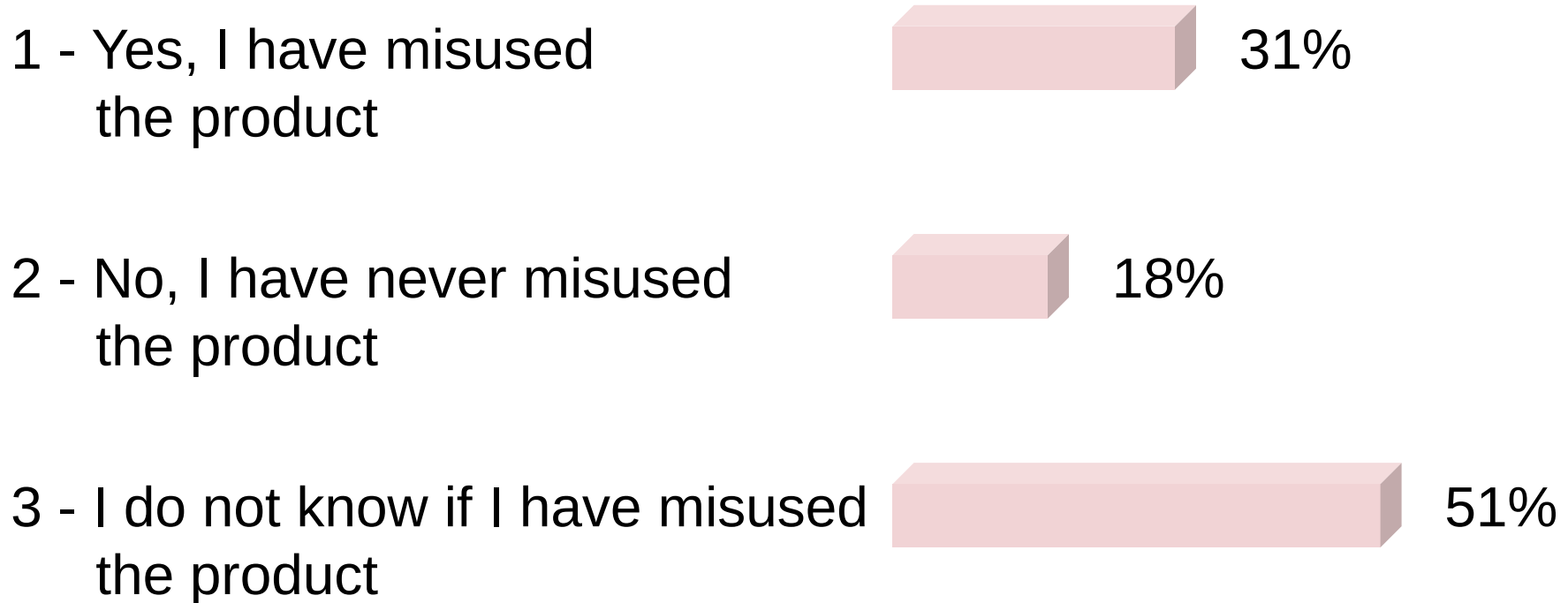


Did you MISUSE the product, even if unintentionally?

- 1 - Yes, I have misused
the product
- 2 - No, I have never misused
the product
- 3 - I do not know if I have misused
the product



Did you MISUSE the product, even if unintentionally?



Warnings and Instructions



Warnings and Instructions

It is about what we communicate to the consumer

- Packaging
- Labelling
- Advertising
- Online information

Challenges

- Real estate on the packaging and product
- What stays with the product
- What is thrown out

- How do you get and keep the consumers attention? i.e., not selling the fear but selling the features

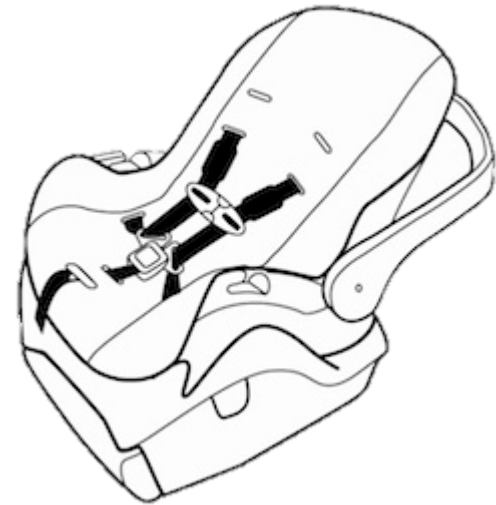
Consumer priorities

1. Wants the utility
 - **Has a purpose in mind**
 - **Does mental expectation match the intended use?**
2. Looks at the price
3. Compares to other options/features
4. "fine print"



Study on Warnings and Attention Capture

- Assumption is that salience or conspicuousness are necessary and sufficient to capture attention
- Very few features of an object that draw attention to themselves without or against the observer's intentions
- Conspicuously bright or large objects relative to their surroundings do not necessarily grab attention
- The mere presence of a warning does not compel an observer to notice it



http://thecarseatlady.blogspot.co.uk/2010_06_01_archive.html

Conditions for possible safety impact of warnings

WHEN MIGHT A WARNING WORK?

A WARNING (SIGN OR LABEL) MIGHT CHANGE BEHAVIOR IF A PERSON:

1. Reads and understands the warning, and

Person:

Is alert and sober, and

Is seeking information, and

Feels need for information, based on past experience

Hazards suspected, but not observable

Doesn't filter out the warning

Not overloaded with information

Not previously exposed to excessive, unnecessary warnings

Sign or label:

Is present (only) when and where needed, and

Includes (only) the information needed, and

Is in an appropriate format

Noticeable, at person's level of information seeking

Brief, legible and understandable

2. Is motivated and able to change behavior.

Person:

Would not know there was a hazard without the warning, and

Believes the warning, and

Warning information is consistent with past experience

Conduct of others is consistent with warning

Source is credible

Does not accept the risk, and

Consequences seen as highly likely (or severe and moderately likely)

Does not believe hazard is under his/her control

Risk outweighs the attraction of the activity

Risk outweighs the social pressure to take risk

Risk outweighs the cost/effort of avoidance

Is capable of making an appropriate change, and

Remembers to change.

CHANGES IN BEHAVIOR MAY IMPROVE SAFETY IF:

1. The right people change, and

2. The changes reduce accidents.

Warning and Instruction



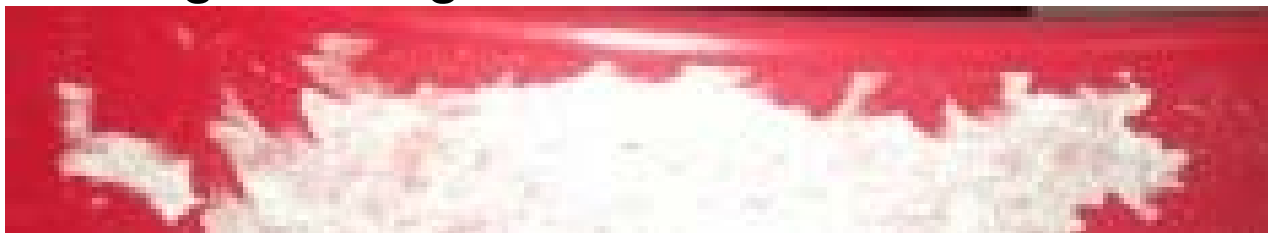
Limitless Critical Paths?

- Due to the potentially limitless foreseeable uses, warnings and instructions can become overly complex
- Or become quite silly and address issues which seem far fetched, i.e., Darwin Award

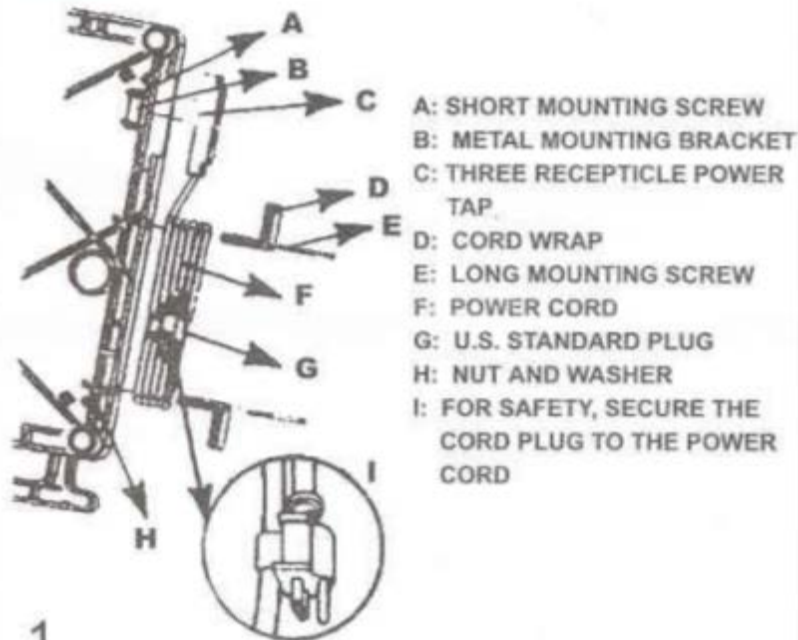
Example from Consumer Blog

“The worst thing about the XXXXXX, however, is the sticker on the seat back. It’s one of those warning labels for idiots who don’t have any common sense and cause companies to spend oodles of money on lawyers and graphic designers so they’re not liable for your stupidity. You know the kind.

Anyway, the warning label was the first thing you saw when you walked in the direction of my kitchen – and it was an eyesore. So I started to peel it off. Except it wasn’t one of those easy-peel stickers that slips off with one tug. Oh, no. This is one of the worst stickers of all time to remove. I am still scratching at it to get all of the remnants off. ”



Consumer View



1

Insert the 3 receptacle power tap into the cavity provided on the underside of the top shelf.

Place the metal mounting bracket over the power tap (per drawing) and using 2 short screws (provided) secure the bracket.

Guide the power cord through the cord management system and secure it with the small plastic "zip tie and screw".

Attach each "L" shaped cord wrap to the shelf using the nuts (provided).

Wrap the power cord around the cord wraps and secure the plug to the power cord (per diagram).

CAUTIONS:

PLEASE DO NOT WORRY IF STILL SOME SMELL FROM THIS FRESH PRODUCT WHEN OPEN IT. AS IT IS NON-TOXIC AND NO DANGEROUS WHILE USING. IT WILL GONE IN FEW DAYS AFTER EXPOSURE IN THE AIR.

Consumer View

Where to Find It

Find what you're looking for from:

The Q&A Index → pp. iv–ix

Know what you want to do but don't know the function name? Find it from the "question and answer" index.

The Table of Contents → pp. x–xvii

Find items by function or menu name.

The Quick Start Guide → pp. 22–23

A brief guide for those who want to get started taking pictures right away.

The Index → pp. 438–443

Search by key word.

Error Messages → pp. 409–416

If a warning is displayed in the viewfinder or monitor, find the solution here.

Troubleshooting → pp. 402–408

Camera behaving unexpectedly? Find the solution here.

⚠ For Your Safety

Before using the camera for the first time, read the safety instructions in "For Your Safety" (pg. xviii).

Digitutor

Digitutor, a series of "watch and learn" manuals in movie form, is available from the following website:

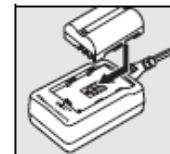
electricalsafetyfirst.org.uk

<https://jessicalouisebell.wordpress.com/2014/03/25/examples-of-good-and-bad-instruction-manuals/>

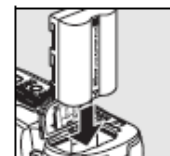
Quick Start Guide

Follow these steps for a quick start with your camera.

1 Charge the battery (pg. 32).



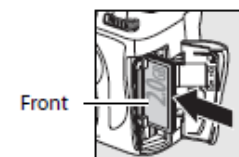
2 Insert the battery (pg. 34).



3 Attach a lens (pg. 36).



4 Insert a memory card (pg. 41).



5 Turn the camera on (pg. 46).

For information on choosing a language and setting the time and date, see page 38. See page 45 for information on adjusting viewfinder focus.





Products can even be “hacked”



Did you read all of the instructions and warnings (not just glance at them)?

- 1 - Yes, I read All of the instructions and warnings
- 2 - I read some of the instructions and warnings
- 3 - No, I did not read the instructions and warnings

Think about electronic products you have purchased over the years, and answer HONESTLY

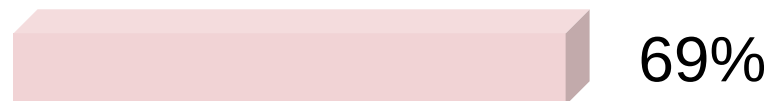


Did you read all of the instructions and warnings (not just glance at them)?

1 - Yes, I read All of the instructions and warnings



2 - I read some of the instructions and warnings



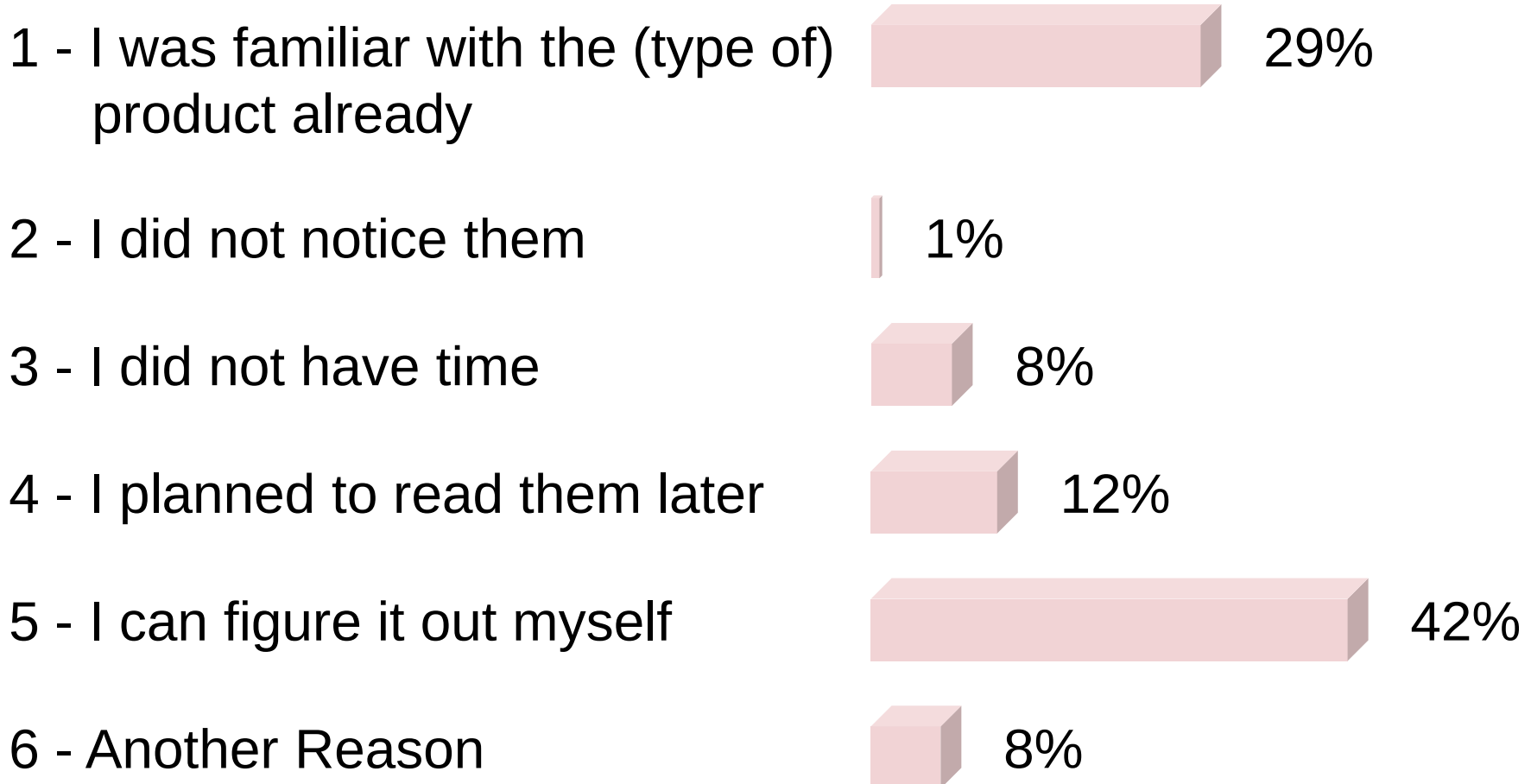
3 - No, I did not read the instructions and warnings



If you did not read all or any of them, why not?

- 1 - I was familiar with the (type of) product already
- 2 - I did not notice them
- 3 - I did not have time
- 4 - I planned to read them later
- 5 - I can figure it out myself
- 6 - Another Reason

If you did not read all or any of them, why not?



Interactive Question



Think about the last 3 electronic products you have purchased, and answer **HONESTLY** :

Open question, think why not, and also what could have helped to get your attention to read through it all?

- Make note of why you did not
- This of specific reasons for each product
- Note anything that could have changed your behaviour

Registration



Registration trends



The difficult way

Product Registration card

Thank you for buying this product. To receive technical support, product upgrade information and to validate your guarantee please complete this registration card, place in an envelope and return it to us at: Any company, Any address, Anytown. PC1 2DE.

Format: **CD32** Date of Purchase

Title Surname

Address

 Post Code

Tel

Fax

Where did you purchase this product?

Store name Town

☐ When is your car insurance due?

☐ Where do you like to go on holiday?

☐ Do you have a cat?

☐ From time to time your name, address and personal details and first born child may be provided to carefully screened companies. If you don't not want to be non-excluded please don't not tick this box.

The easy way

☐

Would you like to register this product to
activate your guarantee?



Did you register your products?

1 – Yes I register them all

2 – Yes I register some of them

3 – No I register any of them

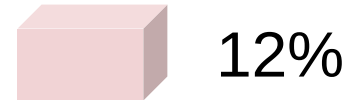
*Consider the last **3** electrical products you purchased, and answer **HONESTLY***

111



Did you register your products?

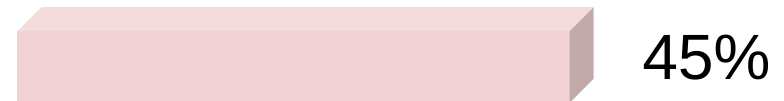
1 – Yes I register them all



2 – Yes I register some of them



3 – No I register any of them



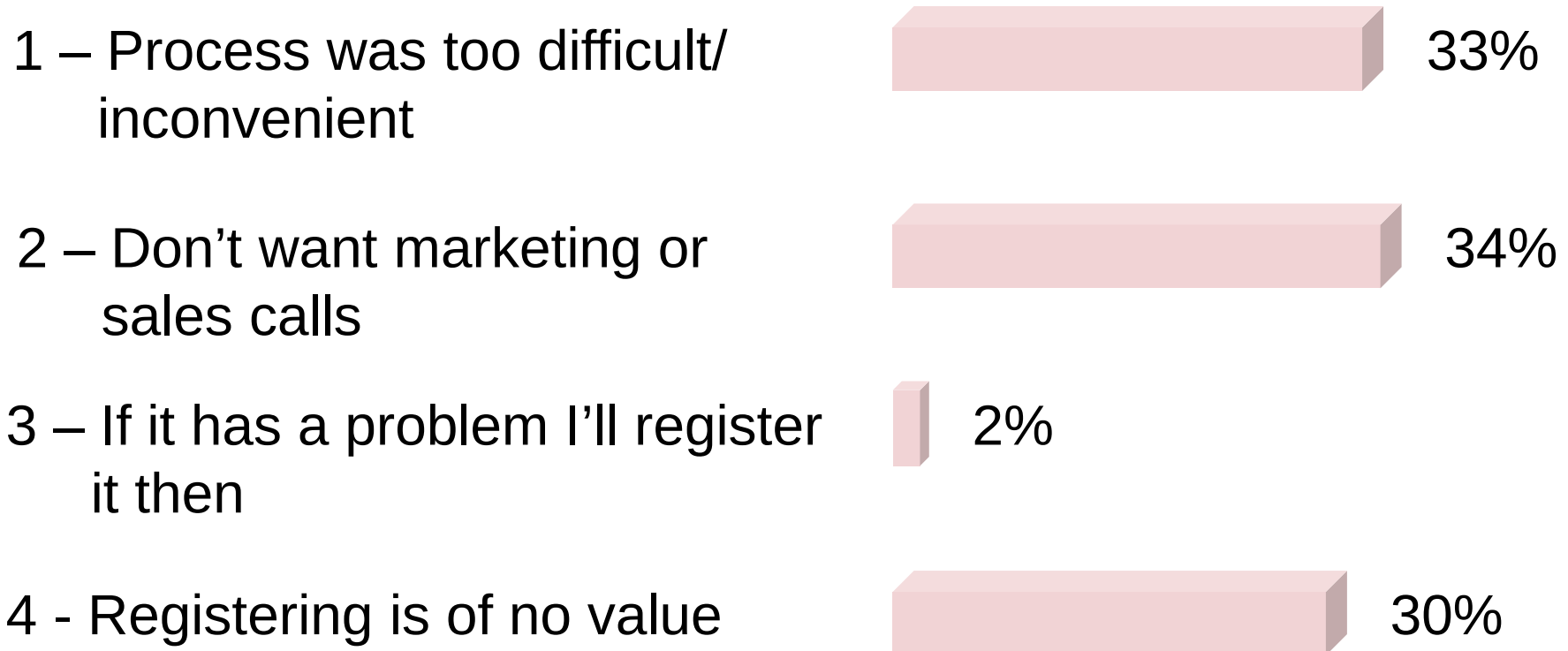


Why didn't you register them all?

- 1 – Process was too difficult/
inconvenient
- 2 – Don't want marketing or
sales calls
- 3 – If it has a problem I'll register
it then
- 4 - Registering is of no value



Why didn't you register them all?



What is the value of registration?

For the manufacturer	Value
Marketing data	Very high
Known guarantee start date	High
Recall database	Low
For the consumer	Value
Marketing data	Negative
Known guarantee start date	Low
Recall database	Low

How do we increase registration rates?



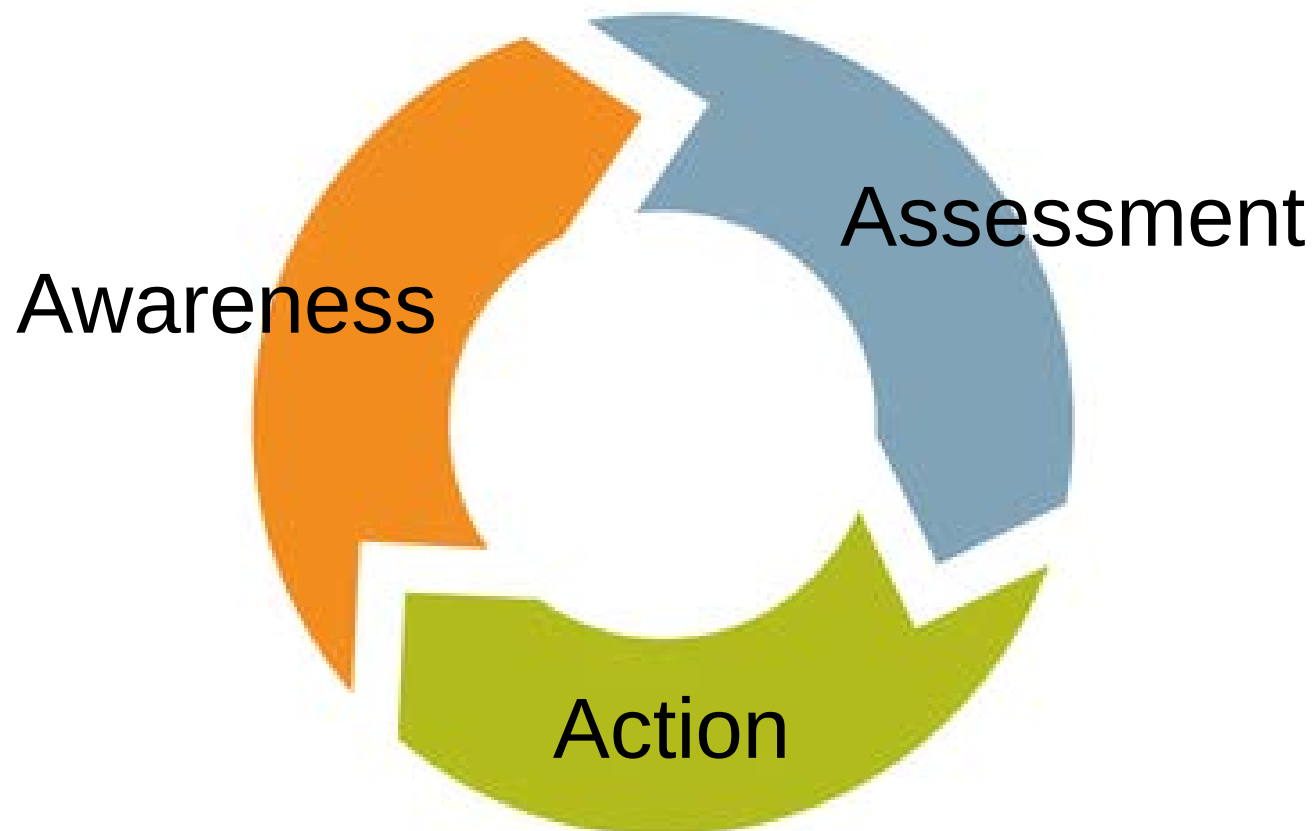
Recall



What is a recall?

“To keep the public safe by removing potentially dangerous goods from the market place”

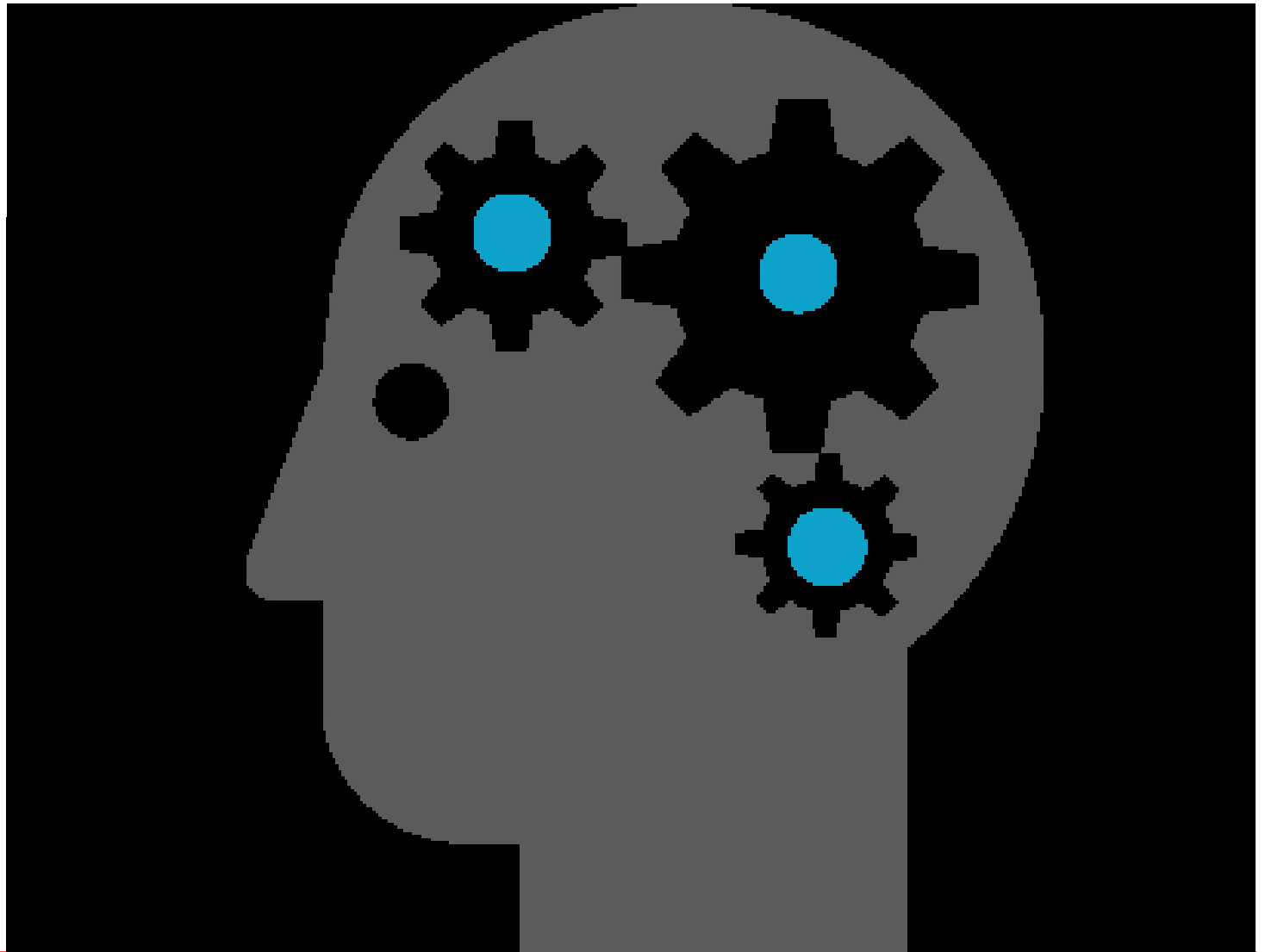
The consumer recall journey



The route to awareness



Criteria for assessment



What action do I take?



**KEEP
CALM
AND
Do
Something**

What does good look like?



What do recalls actually look like?



20%



Why are rates so low?

- 
- Ineffective communications
 - Too many recalls
 - No single source of data
 - Poor communication of risk
 - Mine hasn't failed
 - It won't happen to me
 - Process too difficult
 - Alternative action taken

Alternative action- Breaking the chain

Harm

Hazard



Making the right measurement



Summary



What can be done?

Foreseeable use

1. S
2. C
3. E
4. M
5. F

Warnings and instructions

1. S
2. C
3. E
4. M
5. F

Registration

1. Make it easy
2. Reduce mistrust
3. Add value
4. Build registration into IoT products

Recalls

1. Single source of information
2. Consistent format and detail
3. Explain the risk
4. Make the process easy
5. Fewer recalls

Thank you.



Electrical Safety First is the UK charity
dedicated to reducing deaths and
injuries caused by electrical accidents.
Our aim is to ensure everyone in the
UK can use electricity safely.

electricalsafetyfirst.org.uk

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Coffee / Tea & Exhibition

**Back at 15:00
please!**

