

# Usability Testing

Helping products make the grade



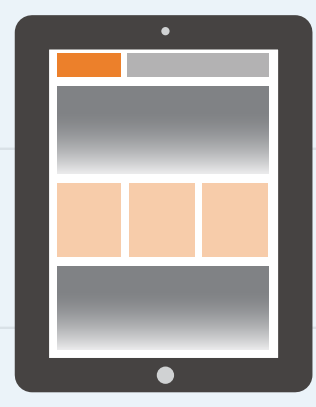
If you create...



Products



Tools



Applications

That require...

Human interaction



Consider... **A+**



Usability testing = Effective products, tools and applications

## Through the years

The earliest instances of usability testing are documented during WWII. A correlation is made between easy-to-use control panels and fighter aircraft pilot performance.

1940's



Computers and electronics increase the prevalence of usability testing, marking the onset of hardware/software testing.

1960's



Xerox® transforms usability testing with the creation of WIMP (Windows, Icons, Menus, Pulldowns).

1970's



Usability testing is primarily used for academic or corporate research in large technology companies.

1980's



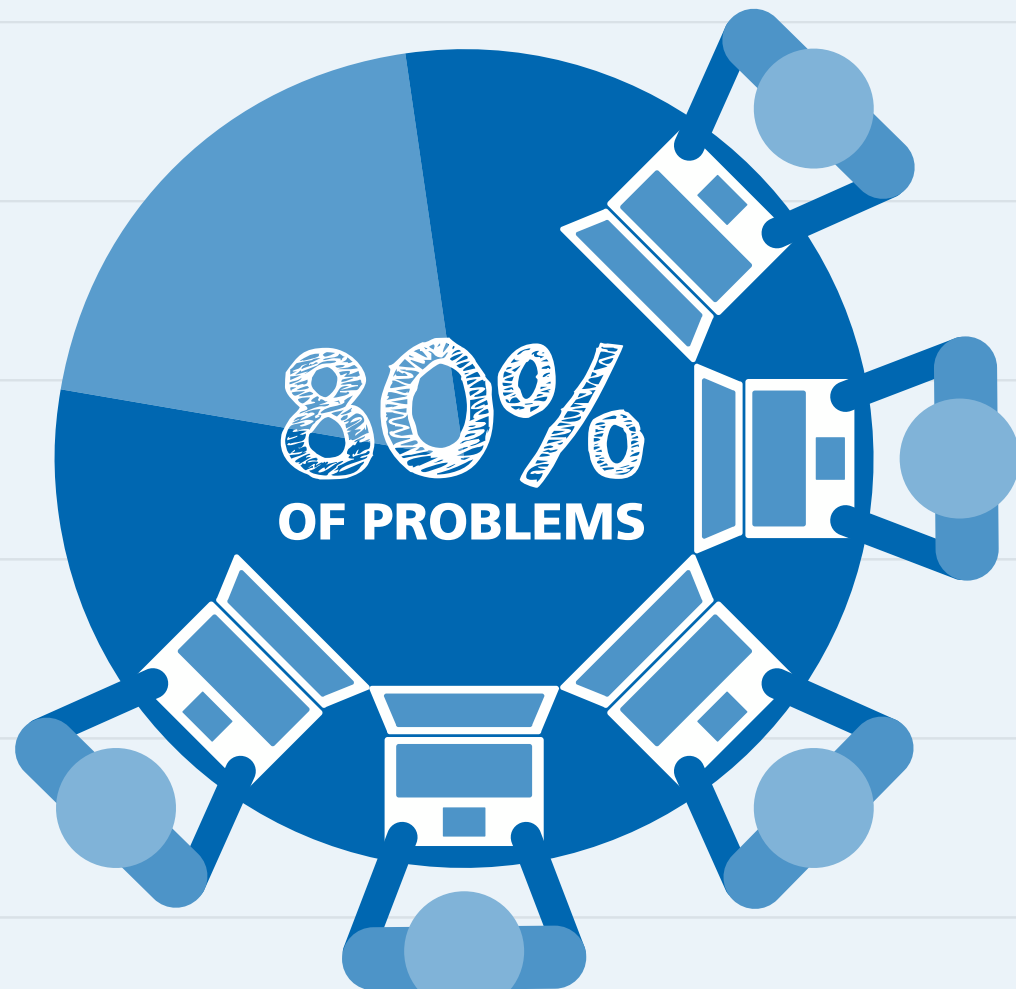
Dot-com boom causes usability testing to flourish and takes it to a new level—customer experience.

1990's



## The arithmetic

It takes only five users to uncover 80% of high-level usability problems.



the **SUM**  
Single Usability Metric

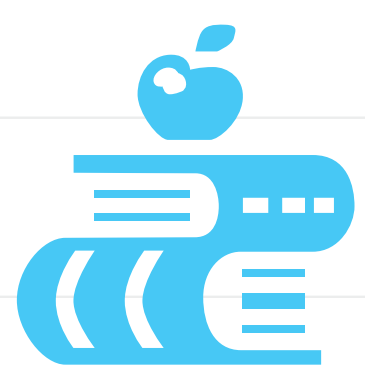
= the average of :

$\bar{x}$  { completion rates  
task-level satisfaction  
task time

## The components

Usability testing measures...

learnability



efficiency



memorability



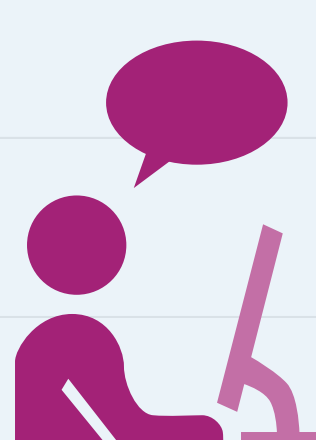
errors



satisfaction



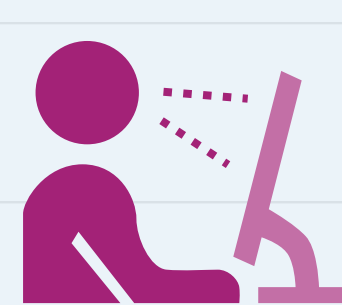
## Testing techniques



**Think/Talk aloud protocols**  
Participants talk out loud while performing specified tasks.



**Co-discovery learning**  
Two users are observed while performing a task together.



**Eye tracking**  
Detects where people's eyes focus while looking at a computer screen.



## Usability testing passes with flying colors

Multiple testing sessions conducted by a University of Baltimore research group on website re-design discover...

Successful task completion



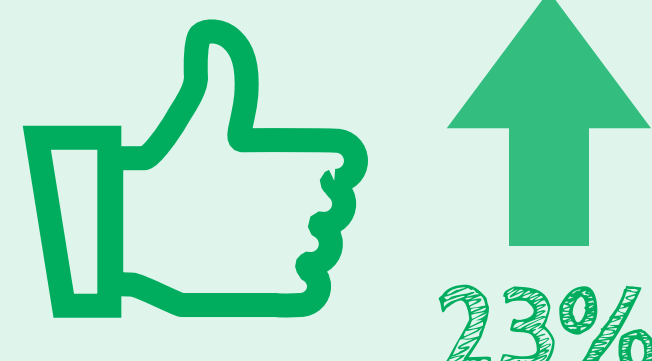
54%

Time-on-task



164%

Satisfaction



23%

Usability testing may be just what you need to ensure your product receives a passing grade



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