

Metodi e tecniche di valutazione dell'usabilità

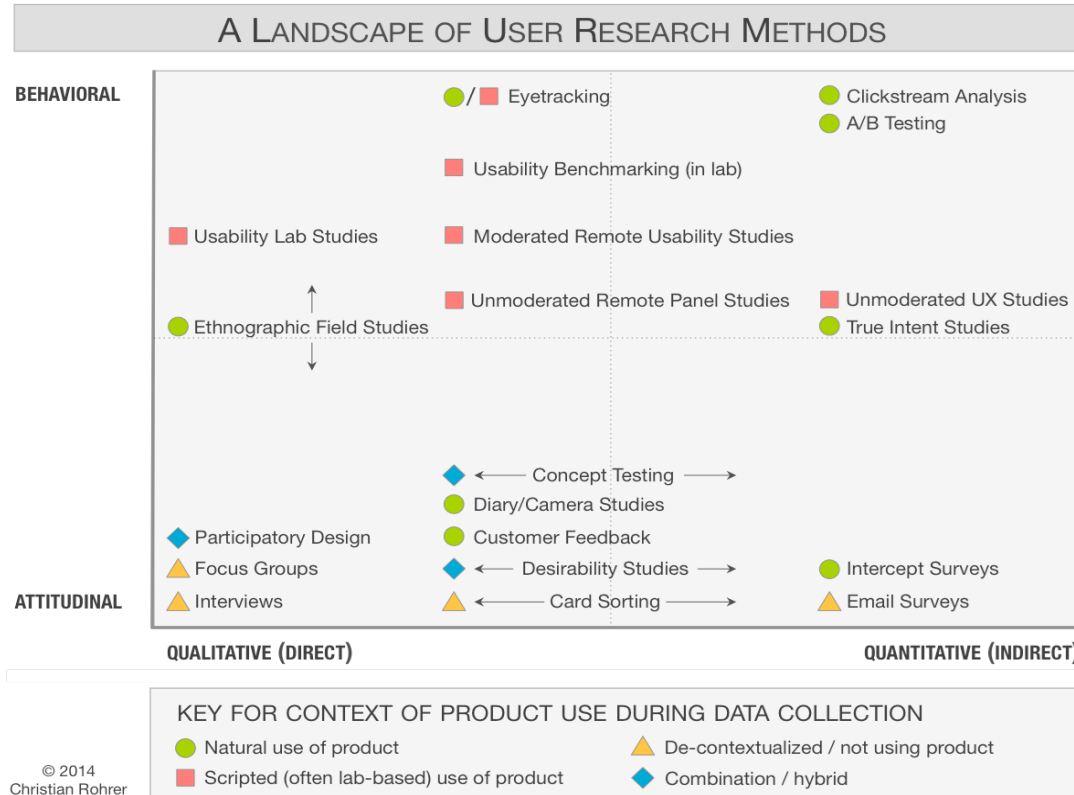


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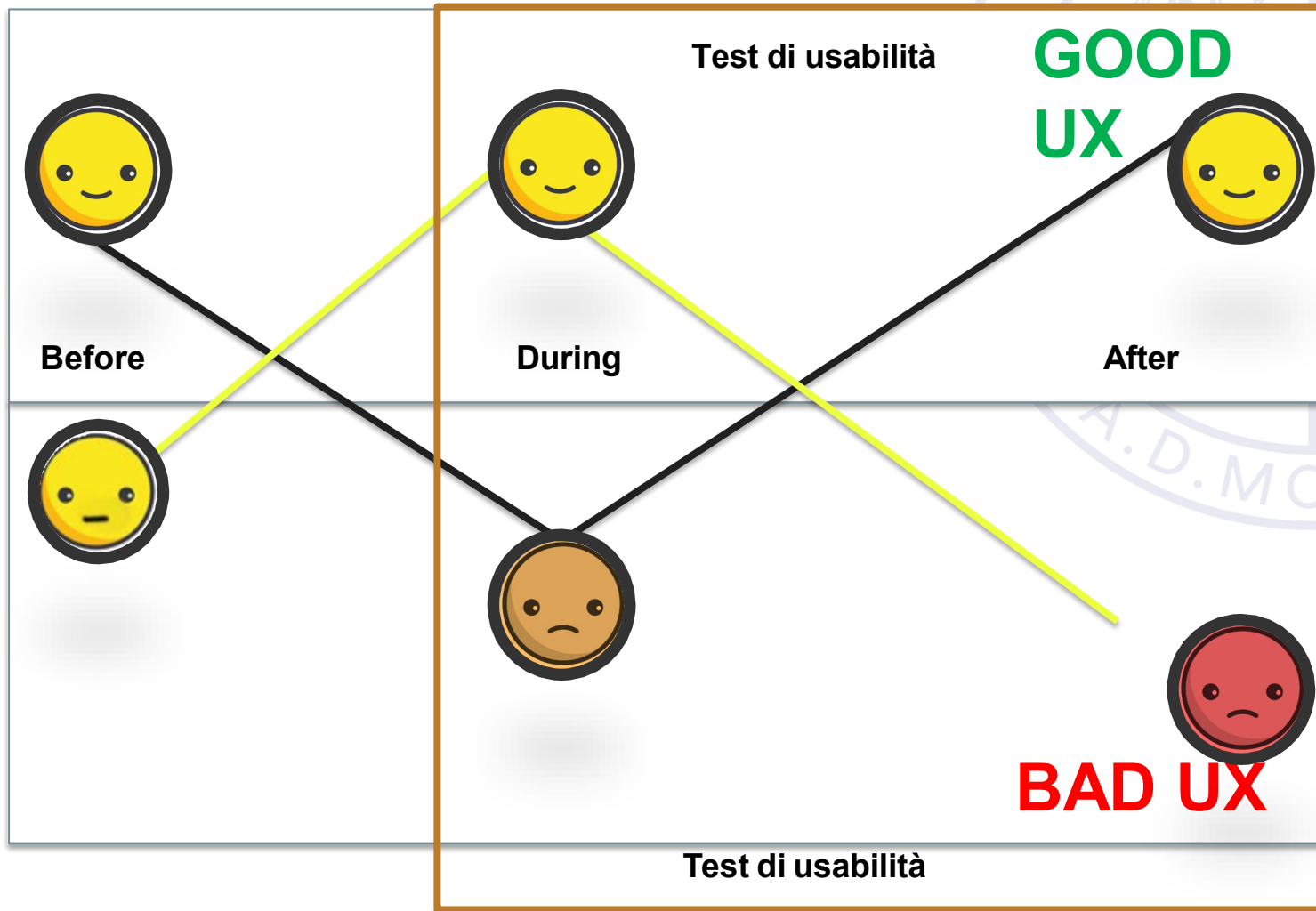


Metodi per investigare l'esperienza



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<https://www.nngroup.com/articles/which-ux-research-methods/>



Aspetti da misurare

(ISO 9241-11)

- **Efficienza**
- **Efficacia**
- **Soddisfazione**
- **Contesto d'uso**



Contesto d'uso
(Replicabilità)

Ecologia del test
≠
Contesto d'uso



Soggetti dell'usabilità

Valutare l'Usabilità:

- Revisione Esperta: con esperti di interazione.
- Test di Usabilità: Con potenziali utenti



Centralità del task

**L'analisi dei task è centrale
sia che si voglia fare una
valutazione esperta sia un
test con utenti**



Mappare i task e la loro corretta esecuzione

Real Examples For HTA

- 1: SignIn
- 1.1: Enter Email
- 1.2: Enter Password
 - 1.2.1: Show Passoward
 - 1.2.2: Hide Password
- 1.3: Forget Password?
- 1.4: Remember me
- 1.5: Click on Login button
- 1.6: Already have an account

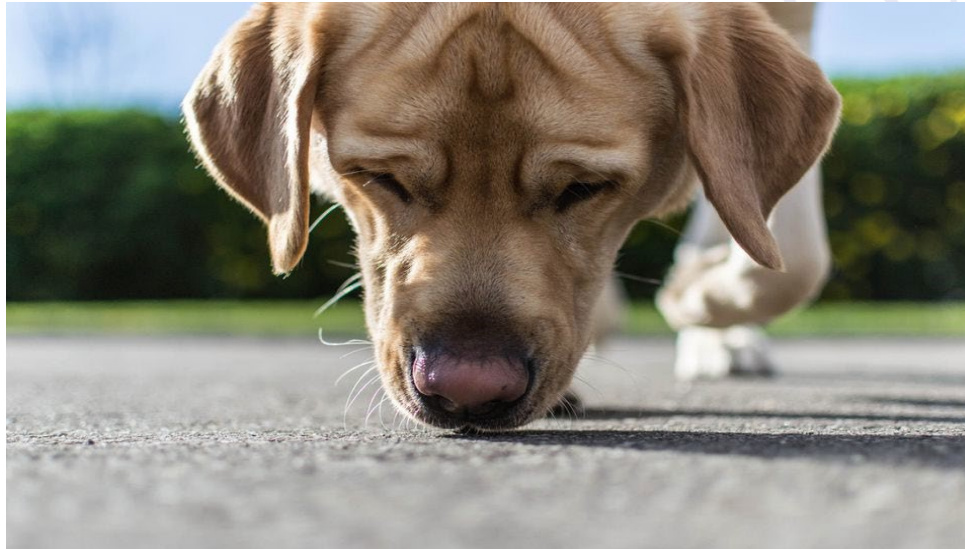
List HTA



Diagram HTA

Cosa testiamo?

Le persone riescono evolutivamente a seguire “l’odore” dell’informazione per trovare quello che cercano...(Pirolli and Card 1995)
Riescono a farlo nel nostro servizio digitale?



Valutazione Esperta

- Valutazione Euristica
- Cognitive Walktrought



Euristiche



Visibility of System Status

1



Match Between System & Real World

2



User Control And Freedom

3



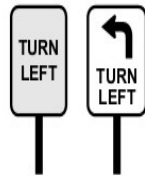
Consistency And Standards

4



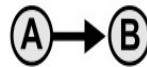
Error Prevention

5



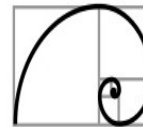
Recognition Rather Than Recall

6



Flexibility And Efficiency of Use

7



Aesthetic And Minimalistic Design

8



Help Users With Errors

9



Help And Documentation

10

Cognitive Walkthrough

- L'utente sarà messo nelle condizioni di formulare un piano di azione corretto?
- L'azione corretta è visibile nel momento in cui si è deciso di compierla?
- Dopo avere individuato l'azione corretta da effettuare, l'utente sarà messo in condizioni di compierla?
- Dopo avere eseguito l'azione corretta, l'utente riceverà un adeguato feedback che lo informi del raggiungimento del proprio obiettivo?

Personas



JASON CLARK
Age 33
Senior analyst

<<I handle data for credit and I love it>>

Jason Clark is born in and grew up in Southall 33 years ago, currently, he lives in Saint Albans with his newlywed wife Laura (30 yo), a GR. In 2006 he held a Bachelor degree in Business and Management at King's College of London. After his degree he worked as insurance and credit broker in an insurance company in Saint Albans, in 2010 he started to work as a financial analyst for the Lloyds branch in Baker Street in London. In the first three years he worked as credit analyst for personal loans, but three years ago he started to assess the subsidized credit and support to SMEs. Jason is interested in new tools that can help him to quickly and effectively handle data and take decisions, by also reducing his workload.



WILL Chapman

<<No matter what it takes, I will open my patisserie>>

BIO

Will live with his parents Rob (49) a factory worker, and Jen (47) a housewife former seamstress, and his two twins brothers, Jeremy and Jason (9), and a sister Debbie (12). He started to work as apprentice in a bakery in the city center when he was 16 and he rapidly became a good baker. He can afford to rent a flat close to the bakery shop, but he prefers to live with his parents to help them and to have the chance to stay close to his brothers and sister. In fact, although Will works everyday from 11pm to 6 am, he always finds the time to stay with his family and to bring on Sunday his little brothers to the support the local football team. He is single, and he is not looking for a serious commitment. He is interested in high technologies and gadgets for cooking, and maybe to often he uses his credit card to buy new tools. Quite rarely he orders tools online, and definitively he is not a fan of social, mobile and web apps. Unfortunately, five months ago Abhainn (72), the owner of the bakery, passed away and his sons sold the activity to Mike. After the death of Abhainn, the work at Bakery is not more the same, and Will is considering to move on, and try to follow his dream: "became a good pastry baker, and open his own patisserie". He recently started to look online for patisserie school, close to Bristol, which could help him to take a diploma, without any previous certification on this field. He is very interested in "The Ashburton Chef Academy", a private school in Devonshire. The school, however, is about 1 hour and half far from Bristol by car and the cost of the course is £15K. He saved in the last 8 years enough money to cover the cost of the course. But he doesn't want to use his saving. Luckily, looking on the web site of the school, he discovered that the school is part of the Professional and Career Development Loan (PCDL). He decided to request the maximum amount £10K to cover the living cost, and the professional equipment required for the course.

BORN Bristol
AGE 23
LIVE Bristol

EDUCATION High School
JOB Baker
SALARY 22K

MARITAL STATUS Single
KIDS None

BANK PROVIDER not in line with PCDL

TECH LITERACY

MOBILE USE

DECISION KEYS

Quality of course	
Find a new job	
Improve quality of life	
Economic need	

KEY CHARACTERISTICS	GOALS	FRUSTRATION & PAIN
<ul style="list-style-type: none"> Hard and reliable worker Solid bank position Passionate to learn Ambitious Low use of IT and Mobile 	<ul style="list-style-type: none"> Acquire new skills Be certified Take a 5 years loan with a low interest Open a new activity Better quality of life for him and his family 	<ul style="list-style-type: none"> Credit history School record Leave alone Not see his family daily Not familiar with loans

Test con utenti: Cosa va preparato?

- Task analysis
- Scenari d'uso
- Strumenti per registrare attività e verbalizzazioni
- Mettere in condizioni gli utenti di riportare i problemi
 - Verbalizzazione di problematiche durante o dopo l'interazione
- Questionario e lista di domande post-test



Test con utenti : Cosa andiamo a misurare?

Efficienza

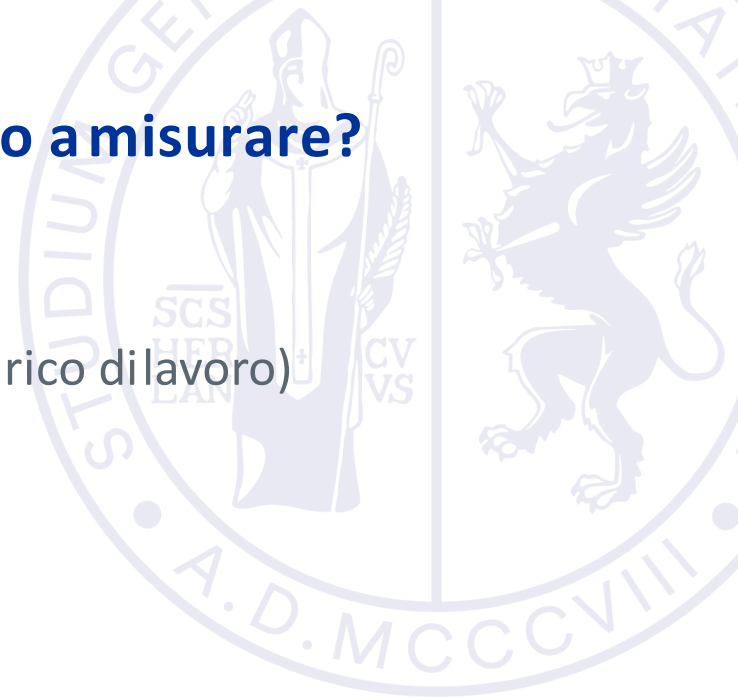
- Tempi di esecuzione degli scenari (anche carico di lavoro)

Efficacia

- Errori di Sistema (es. Manca un link)
- Deviazione dai percorsi attesi
- Obiettivi di scenario raggiunti o falliti

Soddisfazione

- Questionari standardizzati



Soddisfazione

Principalmente per ragioni comparative si utilizzano questionari standardizzati.

Tuttavia questo non esclude la possibilità di utilizzare survey o interviste alla fine del test per indagare aspetti specifici al proprio servizio.

Esempio di questionario standardizzato

System Usability Scale (SUS – 10 item)

1. Penso che mi piacerebbe utilizzare questo sistema frequentemente

1	2	3	4	5
<i>(fortemente in disaccordo)</i>	<i>(parzialmente in disaccordo)</i>	<i>(né in disaccordo, né d'accordo)</i>	<i>(parzialmente d'accordo)</i>	<i>(fortemente d'accordo)</i>

3. Ho trovato il sistema molto semplice da usare

1	2	3	4	5
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10. Ho avuto bisogno di imparare molti processi prima di riuscire ad utilizzare al meglio il sistema

1	2	3	4	5
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Esempi di questionari standardizzati

UMUX-LITE

- Le capacità del sistema soddisfano i miei requisiti.
- Questo sistema è facile da usare.



Misure biometriche

- Eye tracking
- Emotions
- EEG



GRAZIE!



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