



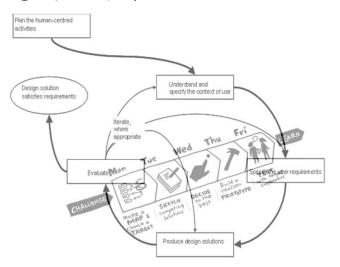
IUM Caso di Studio: Applicazione di UCD Sprint

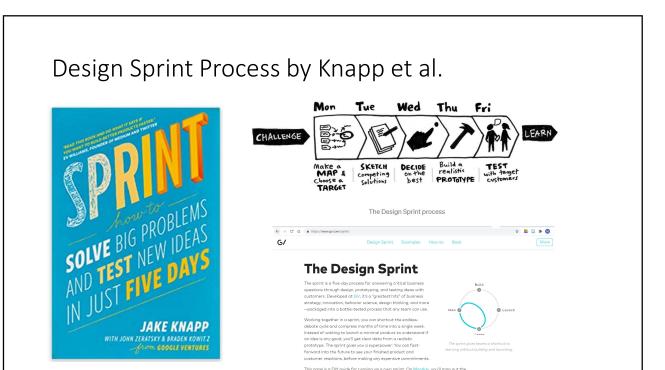
Questo materiale è stato organizzato da Maria Francesca Costabile e Rosa Lanzilotti, IVU Lab, Università degli Studi di Bari, per uso didattico, utilizzando materiale preparato da Marta Lárusdóttir dell'Università di Reykjavic, Islanda. Il materiale può essere fotocopiato solo per uso personale ma non può essere distribuito ad altri. Qualunque altro uso richiede una specifica autorizzazione da parte dell'Università degli Studi di Bari e degli altri autori coinvolti.

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The User-Centred Design (UCD) Sprint Process

- Consists of a chain of methods used to design a software system
- Is structured as a 2 week sprint
 - Taking a brand new idea, analysing it, designing a prototype and evaluating it with users. The process concludes with an iteration
 - Describes what to do in each day
- Combines User-Centred Design (ISO 9241-210) and the Design Sprint by Knapp et al. (previously known as Google Design Sprint)





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The Founders of The UCD-Sprint Process



Marta Lárusdóttir Reykjavik university



Virpi Roto Aalto university



Andrés Lucero Aalto university



Jan Stage Aalborg university



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Design in groups

- Design is better performed by a Team of people
 - Design is a cognitive activity
 - It begins with a creative leap from customer data to the implications for design and from implications to ideas for specific features
- Working together is a new skill
 - It is not tought in schools and rarely tought on the job
 - The case studies carried out in groups are a great experience of working together

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User-Centred Desing Sprint Process (new representation)



Discovery

- 1. Initial mapping
- 2. User group analysis
- Interviewing users
 Overall & UX goals
- 5. Mapping and selecting a target
- 6. Defining a design brief

Images: © Might Could Studios



Design

- 1. Exploring webs suggested by users
- 2. Defining users' tasks for testing
- 3. Brainstorming designs
- 4. Making & selecting good designs
- 5. Happy paths
- 6. Low-fi prototypes

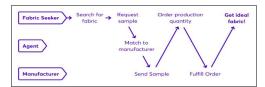


Reality Check

- 1. Low-fi user testing
- 2. Protype review
- 3. Realistic clickable prototype
- 4. 5 users test
- 5. Analysing testing results
- 6. Decide next steps & conclude

The Objective for Making a Map

- Get an overview of the idea behind making the whole system
 - It should not be devided between different sections of the system
 - It should not be too detailed and not too simplistic
 - 5 15 steps in the map



- Instructions:
- 1. List the user groups On the left
- Write the overall goal of the users On the right Buying coffee, delivery of service by the robot,
- 3. Steps to achieve the goal in the middle with words and arrows
- 4. Keep it simple

The map should have from 5 to around 15 steps

5. This is a teamwork process

Initial Mapping

Istruzioni:

- 1. Utilizzate se possibile una lavagna (in assenza usate un foglio di carta)
- 2. Riflettete sul prodotto da progettare e elencate i gruppi di utente che pensate potranno usare il prodotto
- 3. Scrivete ogni gruppo di utenti sulla lavagna a sinistra con un rettangolo intorno al nome
- 4. Decidete quale può essere l'obiettivo complessivo del prodotto (il motivo per cui uan persona userebbe il prodotto) e scrivetelo sulla lavagna in alto a destra
- 5. Riportate con nomi e frecce i passi che gli utenti effettueranno per raggiungere tale obiettivo Descriveteli in modo semplice e considerate 5-15 passi

Risultato:

La mappa iniziale (con i gruppi di utenti)

What is the Long Term Goal?

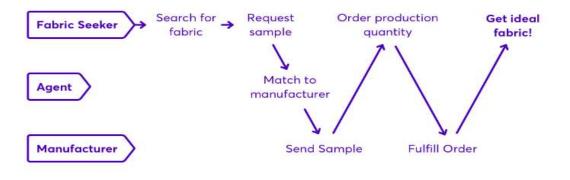
- Think about the long term goal from the users perspective
 - Why would the user want to use the whole system?
 - What will the user benefit from using the system?
- Examples
 - · Buying coffee online with similar experience as buying it having a barrista
 - Wanted to keep the quality of the experience in the goal
 - Wanted to challenge themselves to reach new customers
- In the fabric seeking example?
 - Write that to the far right

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Alcuni elementi di una initial map Gruppi di utenti a sinistra, Long Term Goal in alto a destra Get ideal fabric! Agent Manufacturer

What are the Steps?

- Make a flowchart in between showing how the users interact with your product
 - Keep it simple 5 15 steps



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User Group Analysis

User Group Analysis

| Age: | Age: | Greate: | Greate:

Analysing User Groups

- When analysing potential users groups you analyse:
 - 1. WHO are in the user group?
 - Background information for that group
 - 2. WHY will the software be used?
 - What are the main goals users have in this user group
 - 3. WHAT equipment will they use?
 - Describe the technical equipment needed
 - 4. WHERE will the software be used?
 - Describe the real environment where the software will be used
 - 5. WHEN will this user group use the software?
 - · How frequently and how long each time?
 - 6. HOW important is the group?
 - Is this the main user groups that you will focus on or less important?



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User Group Analysis

	Students in Iceland	Students Abroad	Graduated Student
0	Age: 19 - 99	Age: 19 - 99	Age: 20 - 99
	Gender: All genders	Gender: All genders	Gender: All genders
	Education: Graduated from high school	Education: Graduated from high school	Education: Graduated from university
	Abilities/Disabilities: nothing special	Abilities/Disabilities: nothing special	Abilities/Disabilities: nothing special
	Computer skills: Very good	Computer skills: Very good	Computer skills: Various, depends on the age
MHO	Number: ca. 4.000	Number: ca. 2.000	Number: ca. 30.000
WHY	look up the status of the	Apply for loans and grants, look up the status of the laons and get information	Get information on the loans and payments
WHAT	The technical environment varies, but ususally they have good equipment and internet connection	The technical environment varies, because the students can be all over the world, but most of them have good equipment and internet connection	The technical environment varies, but ususally they have good equipment and internet connection

	Students in Iceland	Students Abroad	Graduated Student	
WHERE	The physical environment is usually good both at home and at the university	The physical environment is usually good both at home and at the university	The physical environment is usually good	
	How often: Mostly used in	How often: Mostly used in	How often: Mostly used twice	
	start and the end of the	start and the end of the	a year, when paying the	
	semester, less inbetween	semester, less inbetween	payments	
	For how long each time: The	For how long each time: The	For how long each time: The	
	system is used for ca. 30	system is used for ca. 30	system is used for ca. 15 mins	
	mins - 1 hour each time	mins - 1 hour each time	each time	
WHEN	Skills: Users will never get	Skills: Users will never get	Skills: Users will never get	
	skilled in using the	skilled in using the system,	skilled in using the system,	
	system, since they use it	since they use it so	since they use it so	
	so infrequently	infrequently	infrequently	
MOM	MOST IMPORTANT + Students Abroad	MOST IMPORTANT + Students in Iceland	Second most important user group	

Interviewing users

• Interview members of the user groups

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Report the interview results

- Summarise the background
 - We had 10 interviewees, 6
 males and 4 females. Their age
 range was from 34 67 years.
 They had been working for the
 company from 6 months to 16
 years
 - 6 were fabric seekers, 2 agents and 2 manifacturers
- Summarise the results

If you have asked all the interviewees the same questions

- Summarise what the interviewees said for each question in your own words
- Often good to report examples.
 One of the interviewees stated:
 "I only use this system, when
 nothing else works".

If you have asked particularly about some issues

Summarise what the interviewees said

Towards UX Goals

User Experience Factors

Desirable aspects

satisfying helpful fun enjoyable motivating provocative engaging challenging surprising

engaging challenging surprising
pleasurable enhancing sociability rewarding
exciting supporting creativity emotionally fulfilling

entertaining cognitively stimulating

Undesirable aspects

boring unpleasant frustrating patronizing

making one feel guilty making one feel stupid

annoying cutesy childish gimmicky

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Examples of experience goals...

Sympathy	thy To experience an urge to identify with someone's feeling of misfortune or distress		
Kindness	ss To experience a tendency to protect or contribute to the well-being of someone		
Nurture	king care of oneself or others		
Respect	o experience a tendency to regard someone as worthy, good or valuable		
Admiration	To experience an urge to prize and estimate someone for their worth or achievement		
Worship	To experience an urge to idolize, honor, and be devoted to someone		
Love	To experience an urge to be affectionate and care for someone		
Relatedness	To experience you have regular intimate contact with people who care about you rather than feeling lonely and uncared of		
Fellowship	Friendship, communality or intimacy		
Popularity To experience that you are liked, respected, and have influence over others rather than feeling like a person whose a opinion nobody is interested in			
Submission Being part of a larger structure			
Self- To experience you are developing your best potentials and making life meaningful rather than feeling st actualizing not have much meaning			
Self-esteem To experience you are a worthy person who is as good as anyone else rather than feeling like a "loser"			
Autonomy To experience you are the cause of your own actions rather than feeling that external forces or pressure are the cau action			
Expression Manifesting oneself creatively			
Dreaminess	To enjoy a calm state of introspection and thoughtfulness		
Desire	To experience a strong attraction to enjoy or own something		
Euphoria	To be carried away by an overwhelming experience of intense joy		
Joy	To be pleased about (or taking pleasure in) something or some desirable event		
Amusement	To enjoy a playful state of humor or entertainment		
Humor	Fun, joy, amusement, jokes, gags		
Enchantment	To be carried away by something that is experienced as overwhelmingly pleasant		
Fascination	To experience an urge to explore, investigate, or to understand something		
Discovery To find something new or unknown			
Exploration	To investigating an object or situation		
Hope	To experience the belief that something good or wished for can possible happen		

(by Virpi Roto)

...Examples of experience goals

Anticipation	To eagerly await an anticipated desirable event that is expected to happen	
Surprise To be pleased by something that happened suddenly, and was unexpected or unusual		
Inspiration	To experience a sudden and overwhelming feeling of creative impulse	
Thrill	Excitement derived from risk, danger	
Sensation Excitement by stimulating senses		
Stimulation To experience you get plenty of enjoyment and pleasure rather than feeling bored and understimulated by life		
Energetic	To enjoy a high-spirited state of being energized or vitalized	
Courage	To experience mental or moral strength to persevere and withstand danger or difficulties	
Pride	To experience an enjoyable sense of self-worth or achievement	
Confidence To experience mental or moral strength to withstand or cope with the situation		
Competence	To experience that you are very capable and effective in your actions rather than feeling incompetent or ineffective	
Challenge	Testing abilities in a demanding task	
Competition	Contest with oneself or an opponent	
Completion	Finishing a major task, closure	
Control	Dominating, commanding, regulating	
Relief	To enjoy a calm state of being free from mental or physical tension or concern	
Relaxation	To enjoy the recent removal of stress or discomfort	
Satisfaction	To enjoy the recent fulfillment of a need or desire	
Suffering	Experience of loss, frustration, anger	
Simulation	An imitation of everyday life	
Captivation	Forgetting one's surroundings	
Fantasy	An imagined experience	
Security	To experience safe and in control of your life rather than feeling uncertain and threatened by your circumstances	
Physical thriving	To experience that your body is healthy and well-taken care of rather than feeling out of shape and unhealthy	
Luxury	To experience that you have plenty of money to buy most of what you want rather than feeling like a poor person who has no nice possessions	

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Experience-driven design uses UX goals

Brief

- Design an e-learning tool for beginner forklift truck drivers
- Save time of a human teacher
- Own pace in learning
- Learn to drive the forklift with enjoyment

UX goals

- Stimulation
- Security
- Competence



Experience-driven Design course work for Rocla by Tatu Vienamo & Egert Uibo Master's students of industrial and strategic design in Aalto ARTS

Istruzioni per scegliere 3 UX Goals

- 1. Considerare gli UX goals (proposti da Virpi Roto)
- 2. Per ogni membro del gruppo: scegliere 3 UX goals e scriverne ognuno su un post-it
- 3. Attaccare tutti i post-it su una parete
- 4. Raggruppare quelli che sono gli stessi o sono collegati
- 5. Decidere i 3 UX goals su cui il team vuole focalizzare il progetto

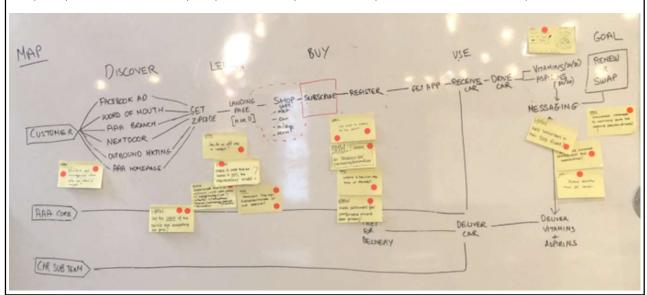
Risultato:

I tre obiettivi UX su cui il team vuole concentrarsi

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Map: un esempio

(Solo per dare l'idea di map; le parole dello specifico esempio non sono di interesse)



User-Centred Desing Sprint Process Passi successivi: Discovery 5 e 6, Design 1-2



Discovery

- 1. Initial mapping
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Images: @ Might Could Studios



Design

- 1. Exploring webs suggested by users
- 2. Defining users' tasks for testing
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- 6. Low-fi prototypes



Reality Check

- 1. Low-fi user testing
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Discovery Step 5: Mapping and selecting a target Istruzioni

- 1. I tre obiettivi UX della fase 4 devono essere integrati nell'obiettivo a lungo termine della mappa, quindi modificare l'obiettivo a lungo termine sulla mappa.
- 2. Scegliere una parte della mappa più critica da valutare con gli utenti. Per farlo, ognuno di voi dovrebbe:

Guardare il materiale dell'intervista

Scrivere su dei post-it ciò che si ritiene sia importante per il feedback che otterrò da parte degli utenti.

Posizionare i post-it sulla mappa, nel punto che si ritiene più adatto.

3. Discutere e decidere quale sarà l'obiettivo del resto dello sprint:

Deve essere abbastanza grande da poter pianificare 20-30 minuti di test utente su di esso.

Deve essere una parte importante dell'intera idea, così quando valutate quella parte otterrete una risposta su quanto sia importante questo sistema.

4. Scegliere un gruppo di utenti target su cui concentrarsi durante i test con gli utenti.

Risultato: 1. Un obiettivo a lungo termine modificato; 2. Una mappa con obiettivo e gruppo utenti target evidenziati – fotografate la mappa e inserire la foto nella documentazione.

Discovery Step 6: Defining a design brief Istruzioni

1. Riempire i campi del modulo design brief

Usate: Modulo per design brief

Risultato: Il modulo design brief completato

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Modulo per il design brief

Client/stakeholder	
UCD sprint team	
Target user group	
Problem statement	
Design statement	
Users' goal	
UX goals	
Constraints	
Competitor	
Design inspiration	
suggested by the user	
group	

Design Step 1: Exploring Webs suggested by Users Istruzioni

- 1. Ciascun membro del team: esaminare le applicazioni o siti web che gli intervistati hanno indicato avere un buon design.
- 2. Annotare ciò che si può imparare da tali applicazioni.
- 3. A turno, presentare queste idee agli altri membri del team.

Ognuno ha a disposizione 3 minuti per mostrare al team le buone idee di design.

4. Annotare le buone idee avute dalle applicazioni esaminate e dalle presentazioni degli altri membri del team.

Risultato:

Un elenco di buone idee di design

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Design Step 2: Defining Tasks & Other Material for The User Tests Istruzioni 1/2

- 1. Guardate l'obiettivo sulla mappa.
- 2. Pensate a ciò che potete chiedere agli utenti di fare per raggiungere l'obiettivo.
- 3. Ogni membro del team crea un compito (task) da far eseguire all'utente durante il test utente che copra l'obiettivo.
- 4. Condividete i compiti con i membri del team.

Assicurarsi di avere almeno 5 compiti.

Assicurarsi che gli utenti impieghino 20-30 minuti per risolvere i compiti.

Se il tempo è più breve o più lungo, è necessario aggiungere o eliminare compiti.

- 5. Ognuno di voi seleziona un compito dall'elenco comune dei compiti ed elenca come si aspetta che gli utenti eseguano il compito.
- 6. Preparate tutto il resto del materiale per i passi di un test utente:

Il testo introduttivo, Le domande di base, L'introduzione al prototipo, Le domande di debriefing Potete dividere questo materiale tra i membri del team.

Design Step 2: Defining Tasks & Other Material for The User Tests Istruzioni 2/2

7. Pianificate il test degli utenti ce si svolgerà in Reality Check Step 1 e Reality Check Step 4:

Decidete quali utenti volete coinvolgere

Pianificate quando, dove e quali persone coinvolgere.

Chiedete alle persone che desiderate coinvolgere se sono disponibili per il test utente.

Decidete i ruoli che i membri del team avranno in ogni sessione di test utente.

Usate: Modulo per definire il materiale per lo user test (disponibile su ADA)

Modulo per pianificare le sessioni dello user test

Risultato:

Un elenco di almeno 5 compiti da utilizzare nel test utente.

L'altro materiale da utilizzare durante la conduzione del test utente

Il piano per le sessioni di test utente

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Modulo per la pianificazione di test con utenti

User X		
Name of the user:		
Conductor:		
Notetaker:		
Place of the testing:		
Time of the testing (date		
and time):		
What user group is the user		
representing:		