

Prepričljive tehnologije

Matjaž Kljun in Klen Čopič Pucihar

September 2015

matjaz.kljun@upr.si in klen.copic@famnit.upr.si

Prepričevanje – persuasion

Prepričevanje je:

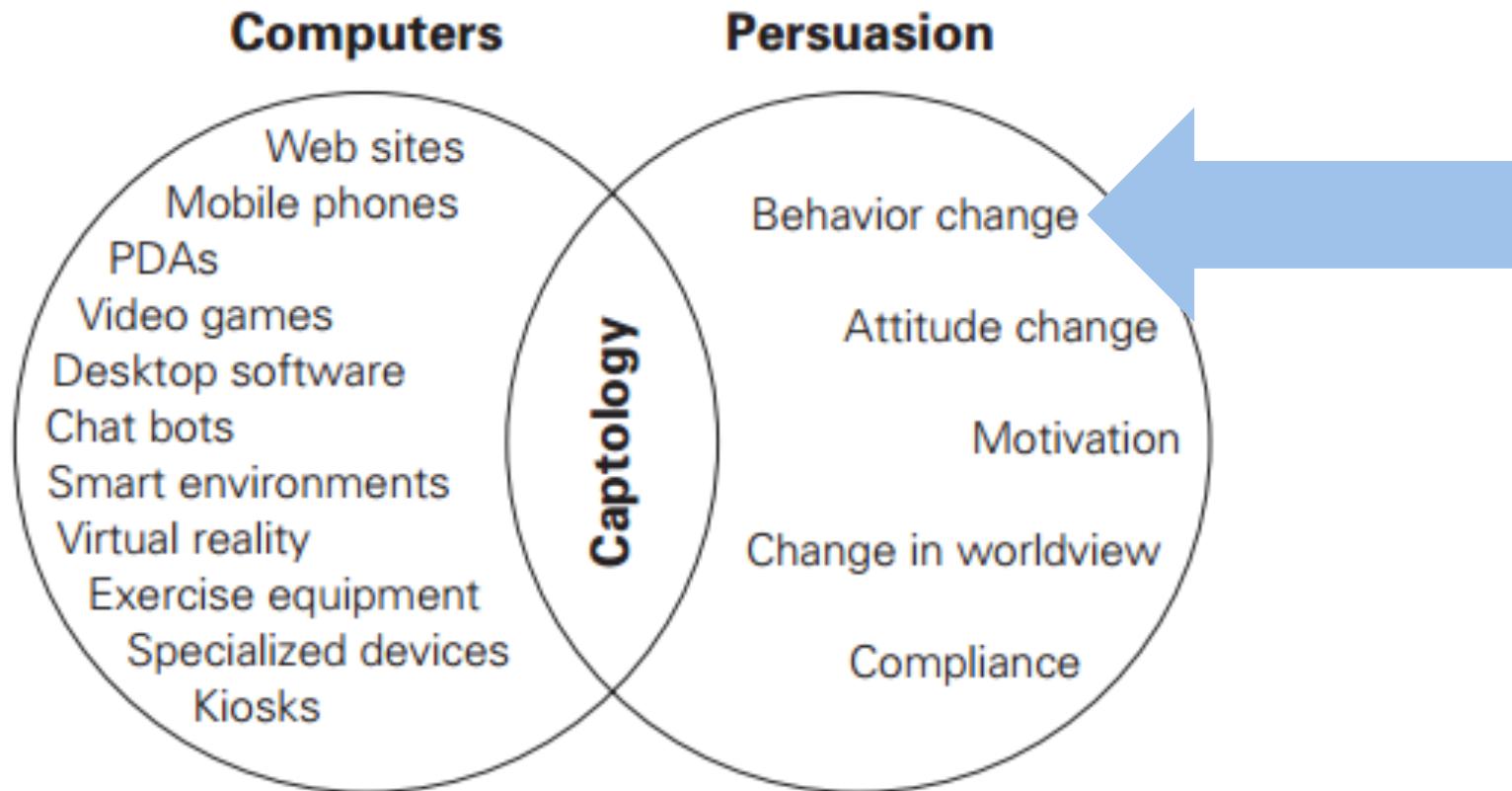
- ▶ **vpliv** na prepričanja, stališča, namere, motivacije, ali vedenje posameznika ali skupine
- ▶ **postopek** namenjen spremnjanju odnosa ali vedenja ljudi, s pomočjo pisne ali govorjene besede namenjene posredovanju informacij, čustev ali obrazložitev, ali njihove kombinacije.

Definicija



BJ Fogg, Stanford University

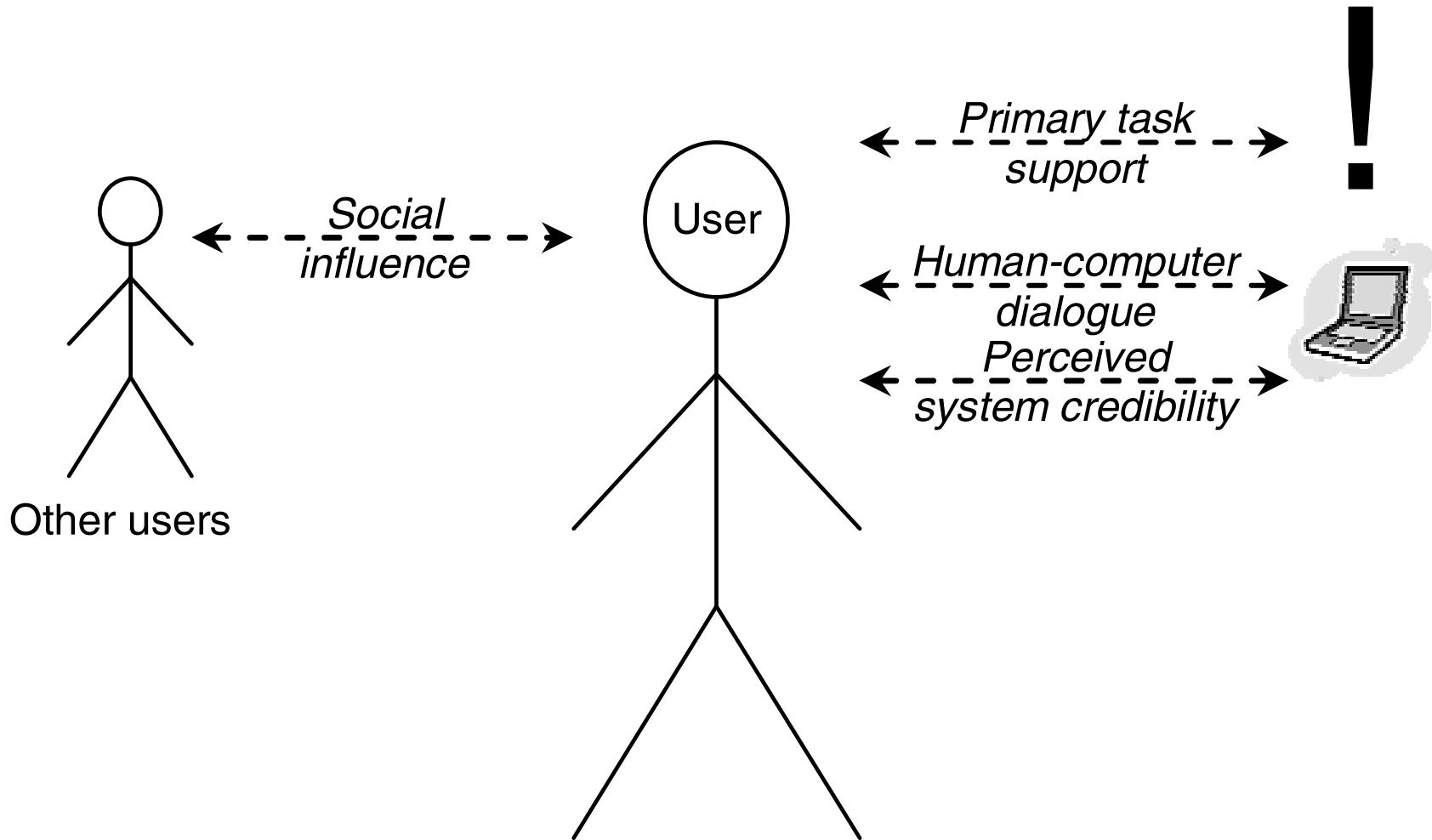
“technology that is designed to change attitudes or behaviors of the users through persuasion and social influence, but not through coercion”
Fogg 2002



Vedenje

- ▶ Trajnostno vedenje
- ▶ Zdravstveno vedenje
- ▶ Potrošniško vedenje
- ▶ Moralno vedenje

Sprememba vedenja



Sprememba vedenja – oblikovanje in psihologija

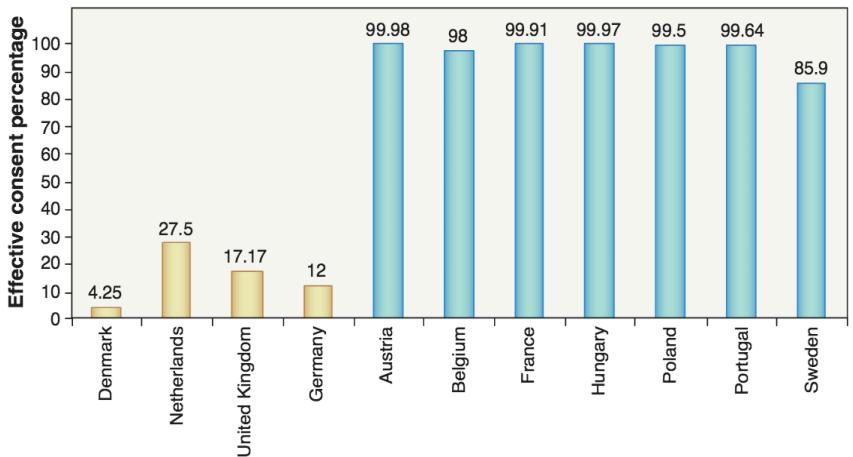


Sprememba vedenja

Oblikovanje

Privzeta vrednost – donacija organov.

Negativno in pozitivno poudarjeno vedenje s preprosto oblikovno odločitvijo – privzeta vrednost na obrazcu.



Effective consent rates, by country. Explicit consent (opt-in, gold) and presumed consent (opt-out, blue).

Psihologija

Three studies explored whether odor can influence people's cognition and behavior without their being consciously aware of the influence ... Finally, a third study established that the mere exposure to the scent of all-purpose cleaner caused participants to keep their direct environment more clean during an eating task.

Sprememba vedenja – Družbeni vpliv



Ko se čustva, mnenja ali vedenje spremeni zaradi vpliva drugih.

Družbeni vpliv (social influence) se kaže v obliki:

- prilagajanja, ugajanja, socializacije, poslušnosti,
- vodenja, prepričevanja, trženja.

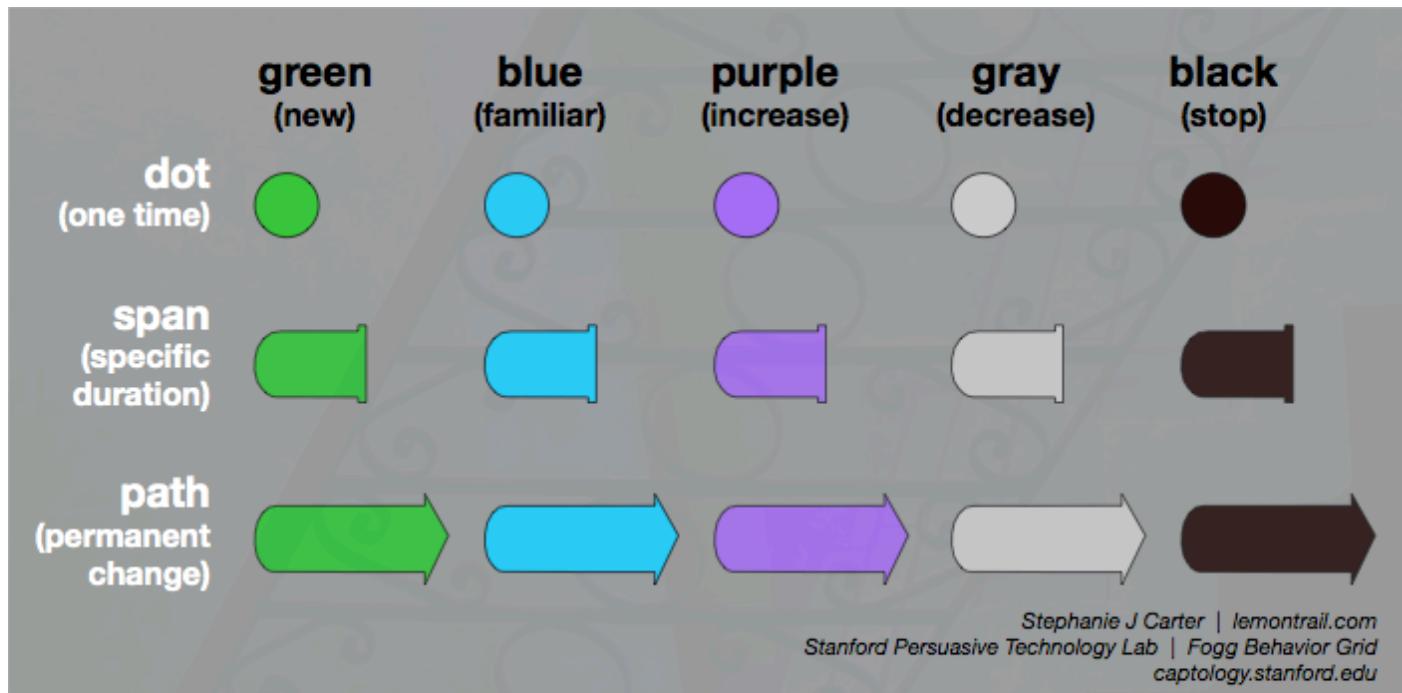
Šest ključnih načel vpliva na vedenje ljudi:

- ▶ Vzajemnost – vrniti uslugo
- ▶ Zavezanost in Doslednost – slediti cilju
- ▶ Družbeno prilagajanje – pogled v zrak sredi trga
- ▶ Slediti avtoriteti – Milgramov poskus z elektrošokom pri napačnem odgovoru
<https://www.youtube.com/watch?v=x0YLCy5PVgM>
- ▶ Naklonjenost – slediti ljudem, ki so nam všeč (npr. Reklame, Bernie Madoff ponzi)
- ▶ Pomanjkanje – samo še 3 primerki na voljo!

Fogg-ova mreža vedenja

Trajanje vedenja

Tip vedenja



Foggova mreža - primeri

	Green behavior Do NEW behavior, one that is unfamiliar	Blue behavior Do FAMILIAR behavior	Purple behavior INCREASE behavior intensity or duration	Gray behaviors DECREASE behavior intensity or duration	Black behavior STOP doing a behavior
Dot behavior is done ONE-TIME	GreenDot Do NEW behavior one time Install solar panels on house	BlueDot Do FAMILIAR behavior one time Tell a sister about eco-friendly soap	PurpleDot INCREASE behavior one time Plant more trees and native plants	GrayDot DECREASE behavior one time Buy fewer cases of bottled water today	BlackDot STOP doing a behavior one time Turn off space heater for tonight
Span behavior has a DURATION, such as 40 days	GreenSpan Do NEW behavior for a period of time Try carpooling to work for three weeks	BlueSpan Do FAMILIAR behavior for a period of time Bike to work for two months.	PurpleSpan INCREASE behavior for a period of time Recycle more of household waste for one month	GraySpan DECREASE behavior for a period of time Take shorter showers this week	BlackSpan STOP a behavior for a period of time Don't water lawn during summer
Path behavior is done FROM NOW ON, a lasting change	GreenPath Do NEW behavior from now on Start growing own vegetables	BluePath Do FAMILIAR behavior from now on Turn off lights when leaving room	PurplePath INCREASE behavior from now on Buy more local produce	GrayPath DECREASE behavior from now on Eat less meat from now on	BlackPath STOP a behavior from now on Never litter again

Novo vedenje – enkratno

- ▶ Namestimo solarne celice na hišo.
- ▶ Danes za malico dejmo alge.



Piano stairs

66% več ljudi je uporabilo stopnice kot ponavadi.



Novo vedenje – daljše obdobje

- ▶ Počnimo jogo vsak dan po pol ure dva tedna.
- ▶ Naslednji teden s vozimo s sodelavcem v službo.



Novo vedenje – trajno

- ▶ Začnimo vrtnariti, zbirati znamke ...



The Urinal Fly

Letališče Amsterdam – 80% manj razlitij



Znano vedenje – enkratno

- ▶ Mami povejmo za ekološko milo in kako nam odgovarja.
- ▶ Danes očistimo zobe z zobno nitko.



Ponovna uporaba brisač v hotelih



- ▶ HELP SAVE THE ENVIRONMENT.
You can show your respect for nature and help save the environment by reusing your towels during your stay.
- ▶ PARTNER WITH US TO HELP SAVE THE ENVIRONMENT
In exchange for your participation in this program, we at the hotel will donate a percentage of the energy savings to a nonprofit environmental protection organization. The environment deserves our combined efforts. You can join us by reusing your towels during your stay.
- ▶ JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT
Almost 75% of guests who are asked to participate in our new resource savings program do help by using their towels more than once. You can join your fellow guests to help save the environment by reusing your towels during your stay.
- ▶ WE'RE DOING OUR PART FOR THE ENVIRONMENT. CAN WE COUNT ON YOU?
Because we are committed to preserving the environment, we have made a financial contribution to a nonprofit environmental protection organization on behalf of the hotel and its guests. If you would like to help us in recovering the expense, while conserving natural resources, please reuse your towels during your stay.

KATERA je NAJBOLJŠA?

- ▶ Druga: ti narediš nekaj in jaz bom naredil nekaj nazaj! Ljudje ne radi najprej nekaj dajo v zameno za nakaj, za kar ne vedo če se bo v resnici zgodilo.
- ▶ Zadnja -> družbeni vpliv. Mi smo nekaj že naredili, zdaj si ti na vrsti. Ljudje se počitijo primorane vrniti darilo.

Znano vedenje – daljše obdobje

- ▶ Kolesarimo v službo naslednja dva meseca.
- ▶ Pijemo vodo, ko vstanemo naslednjih 30 dni.



Znano vedenje – trajno

- ▶ Ugasnemo luč, ko zapustimo sobo.
- ▶ Vsakič ko gremo na sonce, se namažemo s sončno kremo.

Henry Ellis-Paul's Tap Meter

V razmislek: a je tak
merilec rešitev težav
ali povečuje občutek
krivde?



Henry Ellis-Paul's Tap Meter

V razmislek: a je tak merilec rešitev težav ali povečuje občutek krivde?

Splahnjevanje posode:
nožni pedal nam omogoča
da med splahnjevanjem
dveh krožnikov zapremo
dovod vode.



Števec s prikazano porabo



Poudarimo vedenje – enkratno

- ▶ Danes bodimo pozorni med kosilom na dogajanje okoli nas.
- ▶ Posadimo več dreves.



Poudarimo vedenje – določeno obdobje

- ▶ Povečamo dolžino spanja na 8 ur cel naslednji teden.
- ▶ Striktno recikliramo vse smeti naslednji mesec.

Persuasive mirror

Vizualizacija prehranjevalnih in spalnih navad, ter posledic kajenja in sončenja.



Philips DirectLife

The slow, step-by-step program starts by tracking how much you move every day. We'll help you set goals and track your progress. We'll make suggestions about how to increase your activity levels at your own pace, and provide you a personal coach who can help you stay motivated. It's a program you can stick to for the long term, because it's custom built for you.



BinCam



Thieme A, Comber R, Miebach J, Weeden J, Kraemer N, Lawson S, Olivier P. "We've bin watching you": designing for reflection and social persuasion to promote sustainable lifestyles. CHI'12

Poudarimo vedenje – trajno

- ▶ Od danes naprej preživimo več časa z družino in prijatelji.
- ▶ Od danes kupujmo več lokalnih izdelkov.

Tehtnica v Abri na postajališču



Oblikovanje N5

- ▶ Kaj je narobe s to tehtnico?
- ▶ Reklama za fitnes. Lahko bi bila pa trajna namestitev.
- ▶ Ljudi razgalja v javnosti.

Zmanjšamo vedenje – enkratno

- ▶ Kupimo le eno plastenko vode danes.
- ▶ Zvečer pojemo le polovico (obilne) večerje.



Zmanjšamo vedenje – določeno obdobje

- ▶ Popijemo le eno kavo na dan ta teden.
- ▶ Skrajšamo čas pod tušem naslednja dva tedna.



Zmanjšamo vedenje – trajno

- ▶ Zmanjšamo količino sladkarij dnevno.

Končamo vedenje – enkratno

- ▶ Ugasnemo gretje danes ponoči.
- ▶ Med današnjim nakupom ne kupimo sladkarij.

Končamo vedenje – daljše obdobje

- ▶ Ne zalivamo trave celo poletje.
- ▶ Naslednji teden pri kosilu ne omenjamo službenih zadev.

Končamo vedenje – trajno

- ▶ Nikoli več ne smetimo.
- ▶ Ne jemo več hitro pripravljene hrane.



Negativno končanje vedenja

Nespremenjeno privzeto geslo

The image shows two side-by-side screenshots. On the left is a screenshot of a Cisco E-Mail Manager Administration login page. It features a Cisco Systems logo at the top, followed by the text "Cisco E-Mail Manager Administration". Below this are fields for "Login Name:" and "Password:", each with an associated input box. A "Log In" button is located at the bottom of the form. On the right is a screenshot of a "Default Password List" table. The table has a header row with columns: Vendor, Model, Version, Access Type, Username, and Password. The table lists various vendor models and their default credentials. The last entry in the table is "3COM 3Com SuperStack 3 Switch 3300XM".

Vendor	Model	Version	Access Type	Username	Password
3COM	CoreBuilder	7000/6000/3500/2500	Telnet	debug	synnet
3COM	CoreBuilder	7000/6000/3500/2500	Telnet	tech	tech
3COM	HiPerARC	v4.1.x	Telnet	adm	(none)
3COM	LANplex	2500	Telnet	debug	synnet
3COM	LANplex	2500	Telnet	tech	tech
3COM	LinkSwitch	2000/2700	Telnet	tech	tech
Huawei	E960			admin	admin
3COM	NetBuilder		SNMP		ILMI
3COM	Netbuilder		Multi	admin	(none)
3COM	Office Connect ISDN Routers	5x0	Telnet	n/a	PASSWORD
3COM	SuperStack II Switch	2200	Telnet	debug	synnet
3COM	SuperStack II Switch	2700	Telnet	tech	tech
3COM	OfficeConnect 812 ADSL		Multi	adminntd	adminntd
3COM	Wireless AP	ANY	Multi	admin	comcomcom
3COM	CellPlex	7000	Telnet	tech	tech
3COM	cellplex	7000	Telnet	admin	admin
3COM	cellplex	7000		operator	(none)
3COM	HiPerARC	v4.1.x	Telnet	adm	(none)
3COM	3Com SuperStack 3 Switch 3300XM			security	security

Orodja pri oblikovanju

- ▶ Zmanjšanje (reduction)
- ▶ Usmerjanje (tunneling)
- ▶ Prikrojevanje (tailoring)
- ▶ Namigovanje (suggestion)
- ▶ Osebno spremljanje (self-monitoring)
- ▶ Pogojevanje (conditioning)

Zmanjševanje

amazon.co.uk [Try Prime](#)

Cristina's Amazon Today's Deals Gift Cards Sell Help

Shop by Department Search DVD & Blu-ray Go Hello, Cristina Your Account Try Prime Basket Wish List

DVD & Blu-ray Advanced Search Browse Genres New & Future Releases Blu-ray Best Sellers TV Box Sets Bargains LOVEFiLM By Post Prime Instant Video Shop Instant Video

amazon Prime Unlimited streaming of Movies & TV [Start your 30-day free trial!](#)

Featured Categories > Box Sets

A large image of the DVD cover for 'Parks and Recreation Season Five'. The cover features Amy Poehler, Rob Lowe, and Ron Swanson. A quote from Patrick Smith of The Telegraph says, "...one of the funniest sitcoms on either side of the Atlantic". A '15' rating and '3 DISC SET' are also visible.

Parks & Recreation: Season Five [DVD]

Amy Poehler (Actor, Primary Contributor), Rob Lowe (Actor, Primary Contributor), Greg Daniels (Director) | Rated: Suitable for 15 years and over | Format: DVD

★★★★★ 33 customer reviews

Price: £18.75 & FREE Delivery in the UK on orders over £20. [Details](#)

In stock.

Dispatched from and sold by Amazon. Gift-wrap available.

Want it delivered to Italy - Mainland by Monday, 11 May? Order within 18 hrs 27 mins and choose One-Day Delivery at checkout. [Details](#)

20 new from £17.99 2 used from £18.30 1 collectible from £45.49

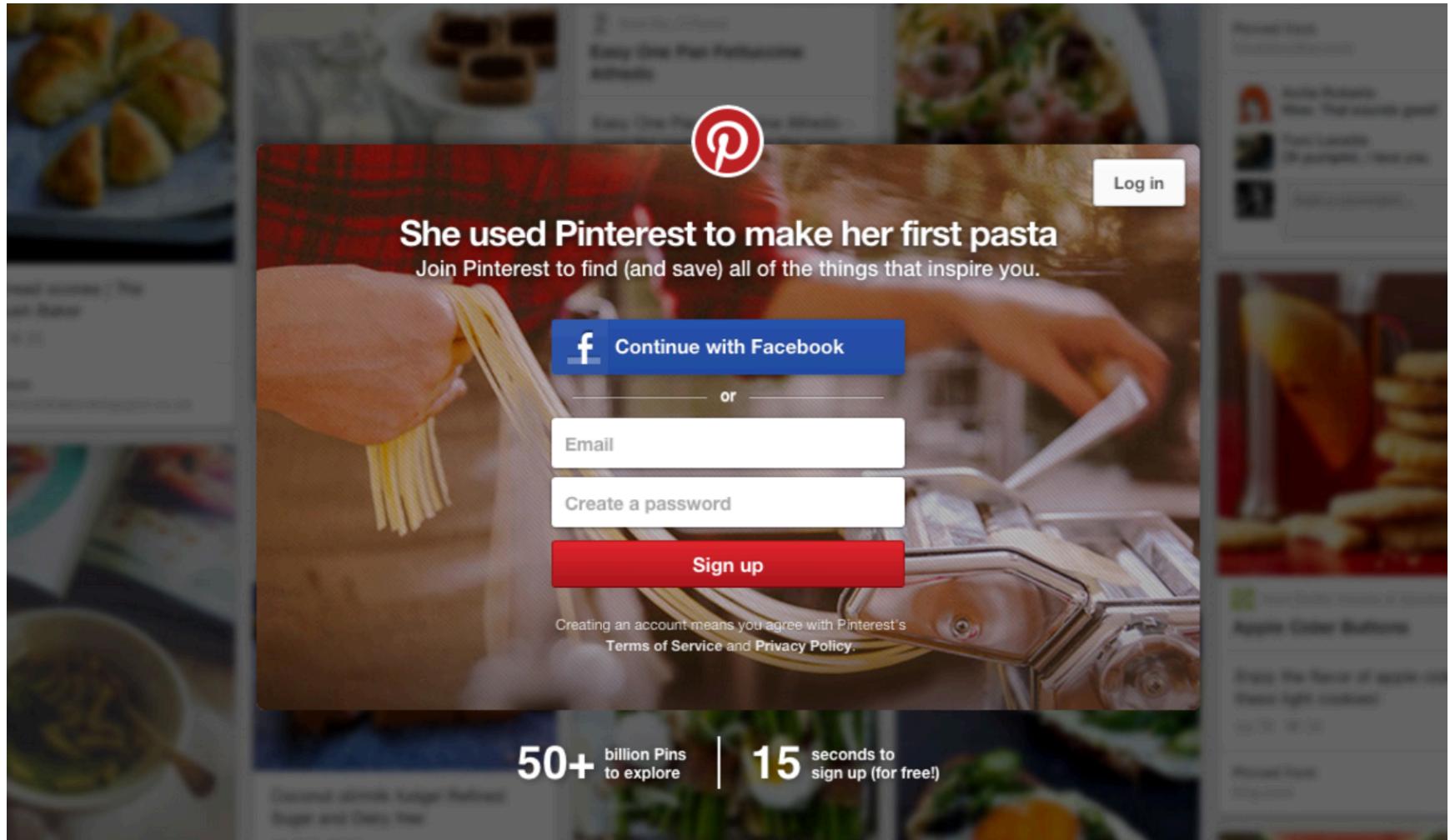
Share [Email](#) [Facebook](#) [Twitter](#) [Pinterest](#)

Quantity: 1 Add to Basket or 1-Click Checkout Buy now with 1-Click® Dispatch to: Cristina Viganò-Briosco This is a gift Add to Wish List

Other Sellers on Amazon 23 used & new from £17.99 Have one to sell? Sell on Amazon

Roll over image to zoom in

Zmanjševanje



Zmanjševanje

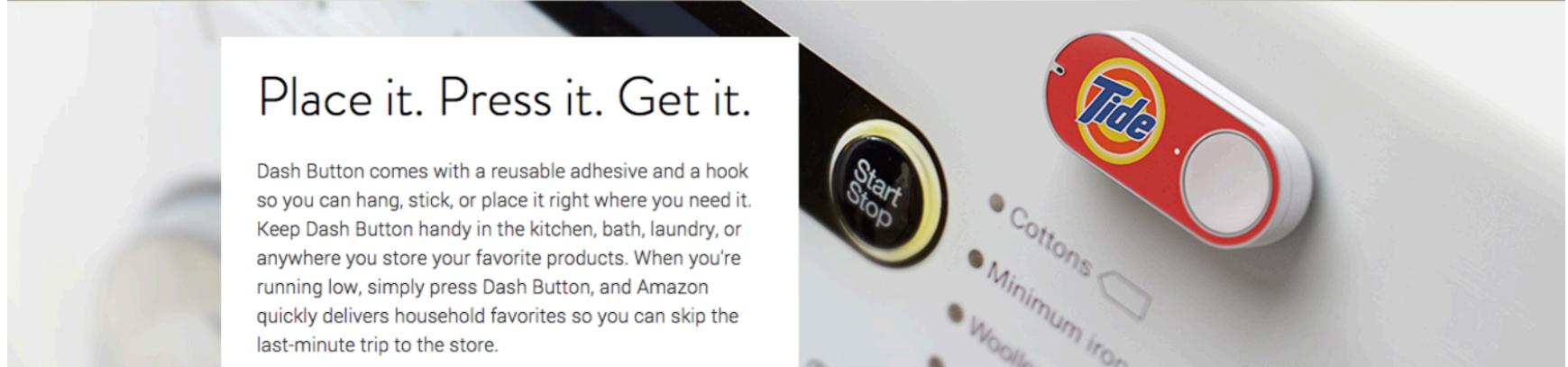


INTRODUCING **amazon dash** BUTTON

- Just press and never run out
- Buy from Amazon with confidence—get the same low prices we offer on Amazon.com
- Choose from favorite household products

FREE For invited customers | Exclusively for Prime Members [Learn more](#)

[Sign in to continue](#)



Place it. Press it. Get it.

Dash Button comes with a reusable adhesive and a hook so you can hang, stick, or place it right where you need it. Keep Dash Button handy in the kitchen, bath, laundry, or anywhere you store your favorite products. When you're running low, simply press Dash Button, and Amazon quickly delivers household favorites so you can skip the last-minute trip to the store.

Usmerjanje

[Sign out](#)



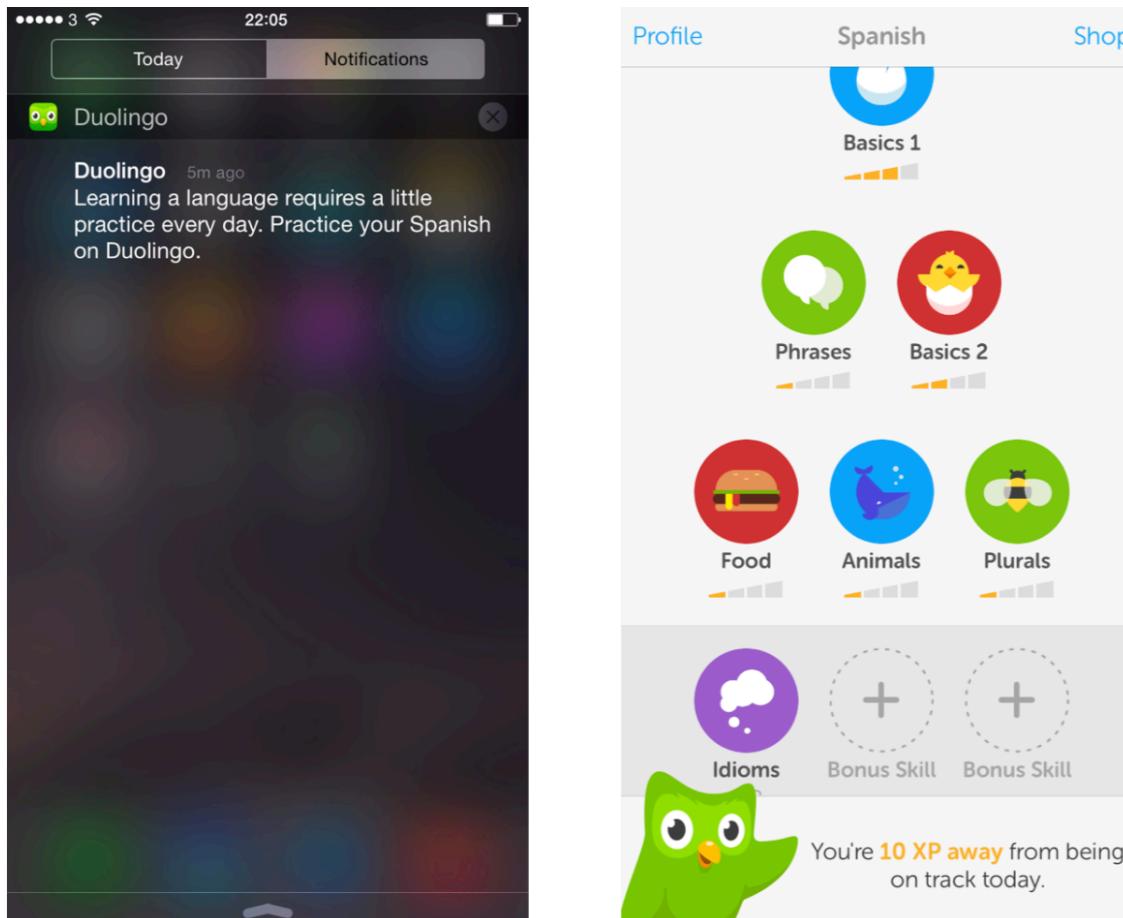
BILLING ADDRESS

1 About you 2 **Billing** 3 Delivery 4 Payment 5 Confirm & Pay

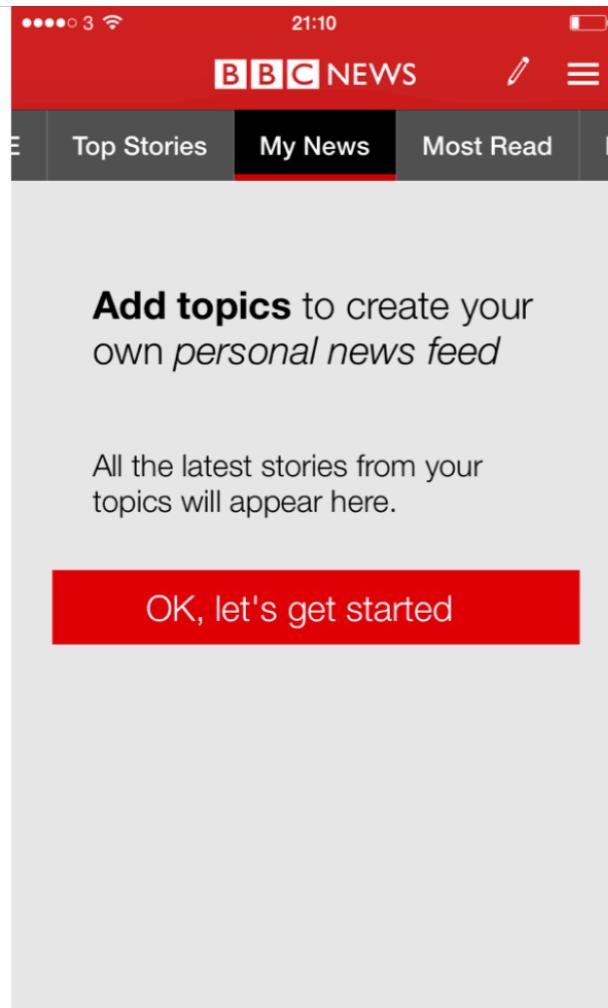
This must match your card statement address

First Name	<input type="text" value="Cristina"/>
Last Name	<input type="text" value="Viganò"/>
Telephone Daytime	<input type="text"/>
Telephone Evening	<input type="text"/> Optional
Mobile	<input type="text"/> Optional
Country	<input type="text" value="UK"/> ▾
House name or number	<input type="text"/> Optional

Usmerjanje



Prikrojevanje



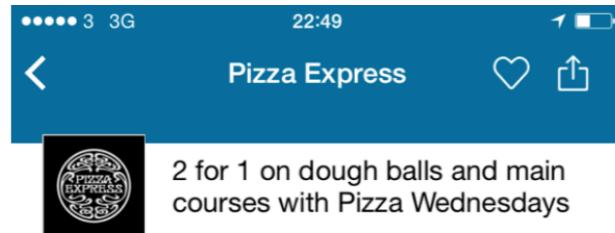
Prikrojevanje

The screenshot shows the Netflix homepage. At the top, the Netflix logo is on the left, followed by navigation links: 'Browse', 'Taste Profile', and 'KIDS'. On the right are search, notification, and profile icons. The main banner for 'Grace and Frankie' is displayed, showing two hands reaching across a table covered with a white cloth, with a vase of white flowers in the background. The banner text reads: 'NETFLIX ORIGINAL Grace and Frankie Watch Season 1 Now'. Below the banner, a description states: 'Jane Fonda and Lily Tomlin co-star as two women forced to reinvent their lives in this funny, honest new Netflix Original series.' A 'More Info' link is provided. Action buttons include a red '▶ Play' button and a black '+ My List' button. To the right of the banner is a volume control icon. Below the banner, a section titled 'Top Picks for Cristina' shows thumbnails for various shows: 'Chalet Girl', 'Grace and Frankie', 'ONCE UPON A TIME' (with a 'NEW EPISODES' badge), 'BEGIN AGAIN', 'Pretty Little Liars', 'DIVORCE INVITATION', 'Just Go With It', and 'Lazzzi'.

Namigovanje



Namigovanje



Offer details

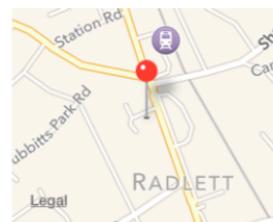
- ⌚ 5 Redemptions left
- ⌚ Expires Wednesday, 13 May 2015
- 📍 Available in 15 branches around you
- 📅 Offer not valid on Monday, Tuesday, Thursday, Friday, Saturday or Sunday

[view terms ▾](#)

Where to find us

114 Watling Street,
London WD7 7AB
2.67 Miles

[Change Branch](#)



Directions

01923 859 111

Add to contacts

2 offers available

Osebno spremjanje

JAWBONE



Osebno spremjanje



Pogojevanje

The screenshot shows the Foursquare mobile application interface. At the top, there is a search bar with the placeholder "Search Foursquare" and a magnifying glass icon. Below the search bar are several icons: a fork and knife, a coffee cup, a martini glass, a credit card, and three dots. A blue header bar indicates it's 12:36 and shows signal strength, battery level, and other status icons.

Below the header, the text "Trending this month >" is displayed. Two restaurant entries are shown:

- Bone Daddies Shackfuyu** (9.1 stars) - Japanese food, ££, Soho. The listing includes a small image of a dessert slice and a "Save" button.
- The Ivy Market Grill** (7.9 stars) - Restaurant, ££, City of Westminster. The listing includes a small image of a table with glasses and a "Save" button.

A "See more" button is located below these entries.

Below the "See more" button, the text "Recommended by > experts" is displayed. One recommended listing is shown:

- Columbia Road Flower Market** (9.4 stars) - Flower Shop, £. The listing includes a small image of a building and a "Save" button.

At the bottom of the screen, there is a navigation bar with four icons: "Search" (magnifying glass), "Saved" (bookmark), "History" (document with heart), and "Personalize" (person icon).

Merjenje vedenja

“Measuring behavior is core to Persuasive Technology” Jaap Ham, TU/e

Trajnostno, Zdravstveno, Potrošniško, Moralno

Healthy	Sustainable	Consumer	Moral
Activity	Carbon footprint	Conversion rate	Crime rate
# steps, calories	km/l, kWh	# orders, calls	# crimes
...



WITH
GREAT POWER COMES
GREAT RESPONSIBILITY

10 napak pri spremjanju vedenja

#1: Relying on Willpower for Long-Term Change

Imagine willpower doesn't exist.

#2: Attempting Big Steps Instead of Baby Steps

Seek tiny success one after another.

#3: Ignoring How Environment Shapes Behaviour

Change your context. You change your life.

#4: Trying to Stop Old Behaviours Instead of Creating New Ones

Focus on Action, not avoidance.

#5: Blaming Failures on Lack of Motivation

Make the behaviour easier to do.

#6: Understanding the Power of Triggers

No behaviour happens without a trigger.

#7: Believing That Information Leads to Action

We humans aren't so rational.

#8: Focusing on Abstract Goals More Than Concrete Behaviours

Abstract: get in shape. Concrete: walk 15 mins today.

#9: Seeking to Change a Behaviour Forever, Not For a Short Time

A fixed period works better than "forever".

#10: Assuming That Behaviour Change Is Difficult

Behaviour change is not so hard when you have the right process.