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**Final dissertation**

**Fogg and Cialdini's persuasive principles present in different  
types of e-services' web pages**

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## **Abstract**

This work is built on the research done on persuasion by Fogg and Cialdini. It investigates the type and number of persuasive tools applied to the web design of different categories of e-services, them being: e-commerce, e-banking, and e-government. The aim is to provide an insight into a possible link between the type of service provided and the persuasive techniques applied to the web design. The results of this study indicate that e-commerce applies almost all the persuasive tools described both by Fogg and Cialdini, while e-government is the subcategory that applies the least amount of persuasive techniques in their design. This study concludes by discussing the results and highlighting limitations and possible future directions.

# Table of Contents

<b>1. Introduction.....</b>	<b>2</b>
<b>2. Background.....</b>	<b>3</b>
<b>2.1 Description of the three main categories of E-service .....</b>	<b>3</b>
2.1.1. E-government .....	3
2.1.2. E-commerce .....	4
2.1.3. E-Banking .....	6
<b>2.2 Persuasive principles .....</b>	<b>7</b>
2.2.1 Fogg’s persuasive tools for web design .....	7
2.2.2 Cialdini Seven principles of persuasive technology .....	10
<b>3. Applying Fogg’s functional persuasive tools on E-services web pages .....</b>	<b>14</b>
<b>3.1 Persuasive tools present in three different e-service categories .....</b>	<b>15</b>
3.1.1 Amazon.....	15
3.1.2. Zalando.....	18
3.1.3. Banco Posta.....	21
3.1.4. ING Direct.....	24
3.1.5. Ministero Della Salute.....	25
3.1.6. Agenzia per l’Italia Digitale.....	27
<b>4. Applying Cialdini’s seven principles of persuasion on E-services web pages.....</b>	<b>29</b>
4.1 Amazon .....	29
4.2 Zalando.....	34
4.3 BancoPosta .....	37
4.4 ING Direct.....	39
4.5 Ministero Della Salute.....	42
4.5 Agenzia per l’Italia Digitale .....	43
<b>5. Conclusions .....</b>	<b>45</b>
<b>6. References .....</b>	<b>48</b>

# 1. Introduction

Recent statistics show the ever-increasing amount of internet users (Johnson, 2021) and the impact of the Coronavirus pandemic on consumers' behavior. Just to provide an example, Italian online consumers have tripled in the first five months of 2020 compared to the same period of the previous year (AGI, 2020). This data shows the importance of establishing an online presence for different types of services as part of the digital transformation of these times. As a consequence of the shift to the online world, which results in high competitiveness among providers, it is crucial to design persuasive web pages for the service offered, so to attract and maintain user attention.

This work aims to assess which kind of persuasive techniques and tools described by Fogg and Cialdini is applied to the design of different web pages, according to the service they provide.

The first section will be dedicated to the general description of e-services and their division according to the following categories: e-government, e-commerce, and e-banking. It will follow an account of some of the current perspectives on the topic of persuasive technologies and tools, with the main focus on Fogg's functional analysis and Cialdini's seven principles of persuasion.

In the second section, there will be a practical analysis of two web pages for each of the three subcategories of e-services mentioned above. The aim is to identify the number and the type of persuasive tools described both by Fogg and Cialdini for each of the categories taken into consideration.

This work offers insight into a possible categorization of the type of persuasive tools that each kind of e-service may apply to their web design according to the final goal of the service they provide.

## 2. Background

### 2.1 Description of the three main categories of E-service

The concept of **E-service** concerns the use of information and communication technologies in different areas (Rowley,2006). E-service has been defined as a web-based service (Reynolds, 2000) or interactive services that are delivered on the Internet (Boyer et al., 2002). In e-service, the customer's interaction or contact with the organization is through technology, such as the website. During an e-service encounter, customers have to rely entirely on sight and sound, whereas the traditional service experience can use all senses. One perspective on e-service is to conceptualize it as an information service (Rust and Lemon, 2001) since the primary value exchanged between the two parties is information. *Subtypes of e-services* are **E-government**, **E-commerce** (or e-business), and **E-banking**.

#### 2.1.1. E-government

**E-government** is a generic term for web-based services from agencies of local, state, and federal governments (Palvia and Sharma, 2007). In e-government, the government uses information technology and particularly the Internet to support government operations, engage citizens, and provide government services. The interaction may be in the form of obtaining information, filings, or making payments, and a host of other activities via the World Wide Web.

E-government can be divided into the subsequent categories:

- *G2C- Government to Citizen*  
G2C are those activities in which the government provides one-stop, online access to information and services to citizens. G2C applications enable citizens to ask questions of government agencies and receive answers; file income taxes (federal, state, and local); pay taxes (income, real estate); renew driver's licenses; pay traffic tickets; change their address, and make appointments for vehicle emission inspections and driving tests.
- *G2B – Government to Business*

In G2B, the government deals with businesses such as suppliers using the Internet and other ICTs. G2B includes two-way interactions and transactions: government-to-business and business-to-government (B2G). B2G refers to businesses selling products and services to the government.

- *G2G – Government to Government*

G2G deals with those activities that take place between different government organizations/agencies. Many of these activities are aimed at improving the efficiency and effectiveness of overall government operations. Examples in the United States include Intelink (an intranet that carries classified information shared by different U.S. intelligence agencies).

- *Government to Constituents (E-Democracy)*

E-democracy refers to the online activities of governments, elected representatives, political parties, and citizens for democratic processes. This includes political or current affairs discussions and online consultations between representatives and their constituents.

### **2.1.2. E-commerce**

**E-commerce** is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals (Gupta, 2014).

The major different types of e-commerce are:

- Business-to-business (B2B)
- Business-to-consumer (B2C)
- Business-to-government (B2G)
- Consumer-to-consumer (C2C)
- Mobile commerce (m-commerce)
  - **B2B** e-commerce is simply defined as e-commerce between companies. This is the type of e-commerce that deals with relationships between and among businesses.

The *B2B market* has two primary components: *e-frastructure* and *e-markets*.

**E-frastructure** is the architecture of B2B, primarily consisting of the following: *Logistics* - transportation, warehousing, and distribution, *Application service providers* - deployment, hosting, and management of packaged software from a central facility, *Outsourcing of functions in the process of e-commerce*, such as Web-hosting, Security and customer care solutions, *Auction solutions software* for the operation and maintenance of real-time auctions in the Internet, *Content management software* for the facilitation of Web site content management and delivery.

**E-markets** are simply defined as Web sites where buyers and sellers interact with each other and conduct transactions.

- **B2C (sometimes referred to as e-commerce)**, or commerce between companies and consumers, involves customers gathering information; purchasing physical goods (i.e., tangibles such as books or consumer products) or information goods (or goods of electronic material or digitized content, such as software, or e-books); and, for information goods, receiving products over an electronic network.
- **B2G** is generally defined as commerce between companies and the public sector. It refers to the use of the Internet for public procurement, licensing procedures, and other government-related operations.
- **C2C** is simply commerce between private individuals or consumers. This type of e-commerce is characterized by the growth of electronic marketplaces and online auctions.
- **Consumer-to-business (C2B)** transactions involve reverse actions, which empower the consumer to drive transactions. A concrete example of this is when competing airlines give a traveler better travel and ticket offers in response to the traveler's post that she wants to fly from New York to San Francisco.

### 2.1.3. E-Banking

**E-Banking** involves consumers using the Internet to access their bank account and to undertake banking transactions. At the basic level, Internet banking can mean the setting up of a web page by a bank to give information about its products and services. At an advanced level, it involves the provision of facilities such as accessing accounts, transferring funds, and buying financial products or services online (Business jargon, 2021). The following terms all refer to one form or another of electronic banking: *personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, remote electronic banking, and phone are banking.*

In most *PC banking* ventures, the bank offers the customer a proprietary financial software program that allows the customer to perform financial transactions from his or her home computer.

Internet banking, sometimes called online banking, is an outgrowth of PC banking. *Internet banking* uses the Internet as the delivery channel by which to conduct banking activity, for example, transferring funds, paying bills, viewing checking and savings account balances, paying mortgages, and purchasing financial instruments and certificates of deposit.

To summarize, we can say that **e-service** is an umbrella term used to describe services that use ICT. A subcategory of that is **E-commerce** which involves technology to create relationships among people and businesses. If monetary exchange needs to be done **e-banking** comes into play. On the other hand, we can say that **e-government** overlaps with e-commerce when it comes to the exchange of goods between government and citizens or businesses and **e-banking** for making transactions or paying taxes.

To visually represent the subdivision in the three main categories, an image was created (Figure 1)



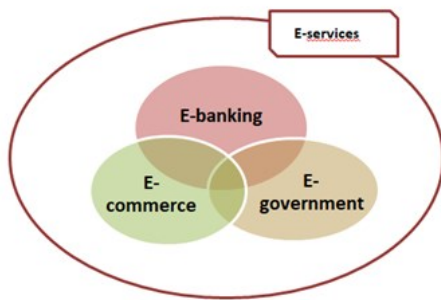


Fig. 1. Graphic representation of e-services with its subcategories

## 2.2 Persuasive principles

### 2.2.1 Fogg's persuasive tools for web design

B. J. Fogg is considered one of the founding fathers of 'persuasive technology' and certainly the most widely cited (Fogg, 1998, 1999, 2003).

Fogg (1998) classified persuasive technologies by the functional role of the technology used: as tools, media, or social actors (Figure 2) which is also known as the *function triad*.

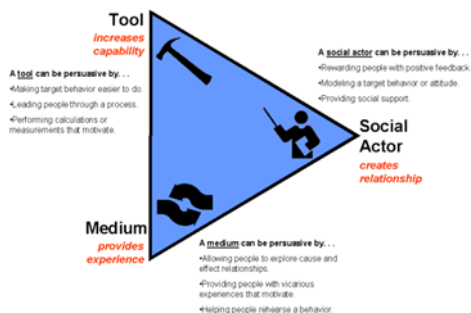


Fig 2. The functional triad used by Fogg

As a *tool*, technology increases the ability of users to perform target behavior by making it easier to perform. This might involve guiding or performing vicariously a tedious task as computations or recurrent research as it happens when on Amazon.com users can save their bank data to avoid filling them in at each transaction. System tools such as Tunnelling, Tailoring, Reduction, Suggestion, Self-monitoring, Surveillance, and Conditioning can all be employed by a designer to persuade.

*Tunneling technologies* are used to guide the user through the web experience and it employs step-by-step instructions to encourage target behavior. According to Fogg's principle of *Tailoring* Information provided by computing technology will be more persuasive if it is tailored to the individual's needs, interests and personality. *Reduction technology* eliminates tedious tasks or automates some of the steps required to finalize a goal. This encourages the user to perform a task with ease. In *suggestion*, technologies provide the user with alternatives to perform a behavior or complete a task. *Self-monitoring*, instead, provide the user with tools to track their behavior to achieve a pre-set goal. *As surveillance tools*, the technology allows one party to monitor the other through observation and it can be considered to be overt or covert (Fogg, 2002). *Conditioning technologies* can be in the form of positive reinforcement as a prize or an incentive to change or shape particular behavior (Fogg, 2002, 2004).

When used as *media*, computers have symbolic or sensory features. In this case, icons, texts, pop-ups are used to convey messages. They may also be able to convey sensory information as smell or vision and for this reason, it can be considered a sensory medium (Fogg, 2002). The main goal of technologies employed in this way is to create persuasive "real-world" experiences to stimulate the user to rehearse the behavior. This enables the user to build an experience around a given object which may encourage behavior change.

As *social actors*, computers use social influence to persuade users (Fogg, 1998, 2002). This happens if technology is designed to provide social and psychological cues and leverage social dynamics or authority. An example of that may be providing positive feedback after action and providing support while performing a task or creating social networks among other users.

People respond socially to technology and this gives the possibility to design it by applying persuasive dynamics that rely on the social influence: the type of influence that is created in social situations.

Fogg (2002) proposes five primary types of *social cues* that may cause users to perceive a social presence in their experience with technology. These are physical psychological, language, social dynamics, and social roles.

### *Physical cues*

Physical attractiveness has a great impact on social influence. Attractive people are more persuasive than those that are unattractive and a plausible explanation for that is the so-called “halo effect” according to which, given objective physical attractiveness of a person, people tend to extend to other fields as intelligence and social skills this positive characteristic (Chaiken, 1979; Eagly et al., 1991). As a consequence of that, Fogg (2002) proposes the principle of attractiveness according to which a computing technology that is visually attractive to target users is likely to be more persuasive.

### *Psychological cues*

Psychological cues from computing technologies can lead people to subconsciously perceive that the computer has a sort of personality. An example of a psychological cue might be a simple text message of the kind “I’m sorry, something went wrong here” after the failure of an online task that needed to be performed on a web page. Evidence from the Personality Study (Nass et al., 1995) and the Affiliation study (Nass et al., 1996) showed that computers that act as people may be more persuasive if they match the personality of the target user and show cooperation. This knowledge led to the identification of the *Principle of Similarity* according to which people are more readily persuaded by computer technology products that are similar to themselves (Fogg, 2002). Another way to influence the user is through *language* and one common example is that are dialogue boxes that make the computing product appear alive and interactive. As an example, e-commerce sites such as Amazon.com continuously interact with the user, from the greeting as soon as you log on the page, to offers and recommendations. This interaction aims to make the user develop positive attitudes about the service.

### *Persuading through praise*

Offering praise to people positively affects their behavior even if it is a computer to do so. As showed by Fogg’s (1997) experimental results, people tend to feel better about themselves and in a better mood after they receive computer praise and as a consequence, they responded more positively. Social dynamics are commonly intended as the set of patterns according to which social interaction

among people of a given cultural group happens. Computing technology can apply social dynamics to convey their social presence and to persuade users. This is the case when e-commerce guides the user in their experience as a companion. They greet them, guide customers through the different products and ask for needed information.

*Reciprocity* is one of the social dynamics with major potential for applications in persuasive technology. This social rule implies that after you receive a favor you feel that you owe to the person that made you a favor so you tend to reciprocate (Gouldner, 1960). Fogg (1997) tested in experimental conditions the principle of reciprocity concerning the need of people to reciprocate when computing technology has done a favor to them (Fogg, 2002). Results of the experiment showed that participants who worked with helpful computers that provided information to the user to perform a task reciprocate them back in a sort of cooperation on a subsequent task to be completed. Computing technologies can also embody the role of *authorities* as teachers, personal trainers, or counselors to persuade the user to perform a pre-set behavior as it may happen for a training app. One prototype of them was Personal Aerobics Trainer (PAT) (Davis & Bobick, 1998) which allowed the user to create their trainers who could interact with them. The virtual trainer is perceived as an authority in this context so suggestions and encouragements are given much more attention by the user.

### **2.2.2 Cialdini Seven principles of persuasive technology**

When it comes to persuasion applied to e-services, also Cialdini's (2001) six principles of persuasion can be considered. These are reciprocity, commitment and consistency, social proof or consensus, liking, authority, and scarcity, to which was added the principle of unity, mentioned in Pre-suasion (2016). These techniques can be used by salespeople or marketing specialists, to subconsciously activate social cues that may motivate the targeted person to behave in the desired way.

*The principle of reciprocity*

Cialdini's (1993) first principle of persuasion states that people are bound to return favors and if they receive something they feel obliged to give something back. As an example, if a web page or an online blog provides you with free useful information people may tend to subscribe to the newsletter to pay the favor of providing useful information without asking anything in return.

#### *The principle of commitment*

According to this principle people want to be seen as consistent so once we publicly commit to something or someone we likely go through with that. This might be explained by the fact that people have aligned commitment with their self-image so acting conversely would impact on they perceive themselves or the image of themselves they want to give to others. The roots of the principle of commitment are similar to those of the *foot in the door technique* (Freedman & Fraser, 1966) which consists in proposing a little first request to a subject then submitting them to a second more expensive request so to obtain more compliance. These techniques have proved to be effective also in online contexts. As an example, Guégen and Jacob (2001) demonstrated a significant foot in the door effect on web pages. Participants were first asked to sign a petition advocating humanitarian causes and those who did that were more likely to browse further in the website and click links than the control group that was not asked to sign a petition.

#### *The principle of scarcity*

Scarcity is the perception of products as more attractive given that they are less available. These products can be limited in quantity or time. The scarcity principle is more likely to have an effect when consumers have proof of a given item is limited. This pushes them to want that even more and to find it more desirable. The principle of scarcity is strictly related to the *Commodity theory* (Brock, 1968) which proposes that the value of a product or service is related to its availability so if a product is in short supply is perceived as having greater value than one that is readily available.

#### *The principle of Liking*

According to this principle, we are prone to "say yes" to those people we like and Cialdini (2001) lists some factors that cause the liking rule to take effect. *Physical*

*attractiveness* may shape and bias people's judgment. This can be confirmed by research on the Halo effect (Thorndike, 1920) which states that assigning positive characteristics such as intelligence, talent and honesty to good-looking individuals contribute to people's positive attitudes towards them.

Furthermore, the online experience is biased by the *halo effect* as confirmed by Lindgaard & Dudeck (2002). Even if poorly performing groups of websites previously judged as visually appealing still satisfied participants in the research group. This lies on the ground that If users like one aspect of a website, they're more likely to judge it favorably in the future.

Apart from physical attractiveness, Cialdini (2001) states that also *perceived similarity* in the area of opinions or personality traits may influence people's behavior. Paying people *compliments* is also a good way to make people comply with us since we tend to like those who provide us with a price, both spontaneously or not. We can also like those who *cooperate* with us and share our goals. One final aspect involved with the principle of Liking is "*conditioning and association*" in the sense that we like something as an extension of something we like that is paired to a given object.

#### *Principle of Authority*

Individuals that are perceived as knowledgeable and credible experts in a given field are perceived as more influential. This might be given to the fact that credibility and authority are building blocks of trust. The more we trust a person the more we feel to comply with them. So when we want to make good choices we tend to trust recommendations done by experts in the field.

#### *Principle of social proof or consensus*

The social Proof theory maintains that a person, especially in situations of uncertainty or where they don't know the proper behavior to follow, will imitate other people. As a consequence, we rely on *social influence* to perform a behavior. The mechanism that guides this principle is Uncertainty. As we said before when individuals are unsure they rely on others for guidance. Similarity with people you imitate based on gender, age, and, social status is also of great importance since we are more likely to adopt a behavior similar to those we are easy to relate to. Social proof is more influential if we perceive people we want to

imitate are knowledgeable about a situation. Also, numbers are important for social proof. The greater the number of people who perform a given behavior or share an idea, the more valid the given behavior or idea is perceived.

### *Principle of Unity*

In “Pre-suasion”: a revolutionary way to Influence and Persuade” (2016) Cialdini explains the seventh principle of Unity. This last principle is based on the insight that human beings tend to be influenced by those they perceive similar to them. This is expressed by Kinship, perception of in-group members, people who are sharing the same living or working space. Given this sense of belonging and perceived similarity, we are more likely to perceive them as being similar to us and as a consequence to trust them. According to Cialdini the Unity principle moves beyond surface liking or similarity and goes into shared identities. This can be expressed through common jargon, by conveying exclusivity and the idea of being one of the few, by invoking family ties, or by co-creating: cooperating on a task.

### **3. Applying Fogg's functional persuasive tools on E-services web pages**

In the following section, there will be the identification and analysis of Fogg's persuasive technologies according to their functional role as tools on different e-service web pages.

E-services were chosen according to the categorization previously discussed: e-government, e-banking, and e-commerce.

Two e-services for each category were chosen. To try and guarantee analysis of a realistic user experience, different tasks for hypothetical users to perform were chosen for each subcategory e-service.

For the *e-government* category: Ministero Della Salute with the goal of downloading the Covid-19 green pass certificate and Agenzia per l'Italia Digitale to activate citizens' digital identity out of the importance given by the government to these two procedures.

In the *e-commerce* category, Amazon was selected because is the first among the 100 most visited Marketplace in Italy, while Zalando was selected because is the first in the field of fashion (Casaleggio Associati, March 2022). The process of purchasing goods was followed to try and identify a link between the type and number of persuasive tools applied and their top position in the ranking. For the *e-banking* category, Banco Poste was chosen because is an e-banking public service provided by Poste Italiane and the task observed was to monitor an already created account. The second e-service chosen for this category was ING Direct because it's exclusively an online business and according to Forbes (June 2020) is the top e-banking service in the world. The task analyzed was the creation of a new bank account. To make the process of identification of Cialdini's persuasive principles and Fogg's functional tools more immediate on the different web pages, a taxonomy along with a summary table of the persuasive technologies found on each web page for both was created.



### 3.1 Persuasive tools present in three different e-service categories

Tunnelling	guides the user through a sequence of activities, step by step
Reduction	simplifies a task that the user is trying to do
Tailoring	provides customer information and feedback based on their actions.
Suggestions	gives suggestions to the user at the right moment and in the right context.
Self-monitoring	enables the user to track his own behaviour in order to change it accordingly to a predetermined goal.
Surveillance	observes the user overtly in order to increase a target behaviour.
Conditioning	relies on providing reinforcement (or punishments) to the user in order to increase a target behaviour.

Fig. 3. Taxonomy of Fogg's functional tools for persuasive technology.

	Amazon	Zalando	Banco Posta	ING Direct	Ministero della salute	Agenzia per l'Italia digitale (agid.gov.it)
Tunnelling	x	X	x	x	x	x
Reduction	x	X	x	x	x	x
Tailoring	x	X		x		
Suggestions	x	x	x	x	x	x
Self-monitoring			x			
Surveillance	x	x	x	x		x
Conditioning	x	x				

Fig. 4. Summary table of Fogg's persuasive technologies present on the different e-services' web pages.

#### 3.1.1 Amazon

##### Tunneling

It is illustrated in the buying and check-out process made of different steps (Fig. 5-7). After each step, the customer is encouraged to continue until the end of the purchase.

Step 1. Choosing the product among many options provided by the keyword

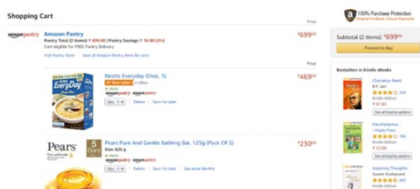
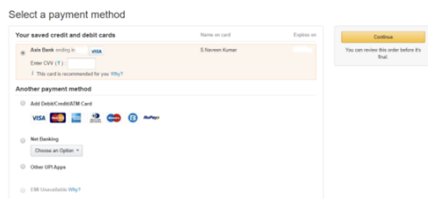
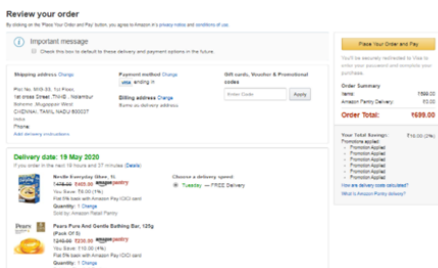


Fig. 5. Selection of the product to buy

Step 2. Select the payment modality



**Fig. 6.** Selection of payment modalities during purchase procedures  
**Step 3. Cross-checking once and placing the order**



**Fig. 7.** Checking out process before placing the order

### Reduction

The principle of reduction applied on Amazon’s website works on the idea that making things easy to the customer helps them to complete the purchase because no obstacle that might prevent them from completing it is present. As it is shown in Figure 8, customers can choose to go directly to check out with one click, provided that they have payment information saved on their account.



**Fig. 8.** Buying options displayed on Amazon

### Tailoring

The feature of adding the pronoun “my”, as shown in the drop-down menu of amazon’s personal area (Figure 9), might be designed to let customers feel that every part of the user experience is built around them and their needs. Furthermore, another example of tailoring is the design of pre-selected sets of tools that a certain category of people might find useful based on their needs, as in the case shown in Figure 9, the work from home essentials.

### Il mio account

- Il mio account
- I miei ordini
- La mia Lista Desideri
- Consigliati per te
- I tuoi animali domestici
- Iscrizioni e abbonamenti
- Il mio Amazon Prime
- Il mio Iscriviti e Risparmia
- Crea un account Amazon Business
- I miei contenuti e dispositivi
- Il mio Prime Video
- Il mio Kindle Unlimited
- La mia libreria musicale
- Il mio Amazon Drive
- Le mie app e i miei dispositivi
- Usa un altro account
- Esci



Fig. 9. Example of tailoring on Amazon website

### Correlati agli articoli visualizzati



Fig. 10. Products similar to the selected ones

### Consigliati in base alla tua cronologia di navigazione



11. Products suggested by Amazon

After a quick analysis of the user's previous choices and last visits, Amazon tailors specific offers that might interest the customer so that the user can immediately access products that most likely will attract them (Fig. 10 and 11).

### Suggestions

#### Spesso comprati insieme



Fig. 12. Pre-packed buying options offered by Amazon

When customers select a product and have already started the process of purchasing it, Amazon offers the possibility to add more products of the same category to the cart (Fig. 12). This may lead to further purchases.

### Surveillance

By signing the consent for the use of personal information, customer experience is tracked. According to privacy policies (Fig. 13), this is done to better the user experience by showing ad-hoc products or advertisements based on previous customers' choices and interests.

## Customize cookie preferences

We use cookies and similar tools (collectively referred to as "cookies") for the purposes described below. Approved third parties also use these tools for limited ad-related purposes described below. We will apply your cookie preferences as part of this Amazon service on this browser as well as any other browser you are logged in from. If you are not logged in, we may have to ask you again for your preferences.

[Accept all cookies](#) [Save custom preferences](#)

### Operational cookies

Operational cookies are used to provide our services and cannot be disabled for these purposes.  
- [Learn more about operational cookies.](#)

Advertising cookies  Enabled  Deactivated

We also use cookies to show certain types of ads, including for products and services that are not available on Amazon, and for certain ads that are relevant to your interests. Approved third parties may also set cookies when you interact with Amazon's services. Third parties use cookies when they present advertising content, including ads related to your interests, and to measure the effectiveness of their ads and provide services on behalf of Amazon.

Fig. 13. Banner for cookies preferences selection

## Conditioning

Amazon provides users with discounts if they sign up for recurring purchases. This feature might be designed to motivate to buy the product given that they were offered a discount for that. Discounts are made evident with different coloring (Fig. 14).

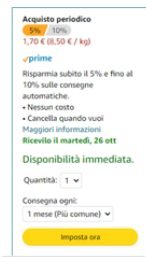


Fig. 14. Amazon's side banner with an offer for discounts

Something simple as thanking (Fig. 15) at the end of the purchase is positive feedback given to the customer. This feature might be designed to increase customer loyalty to the brand given the positive experience they have been provided.

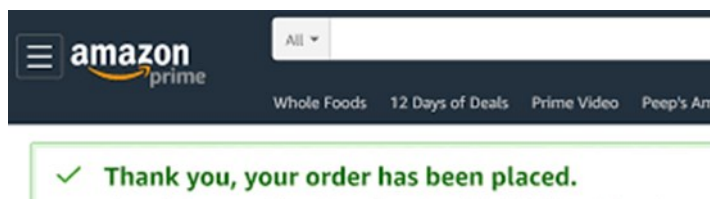


Fig. 15. End of purchase procedure with thanks for purchasing

### 3.1.2. Zalando

#### Suggestions

Since the opening page, the first highlighted thing the customer sees is a suggestion to activate the newsletter and receive special offers (Fig. 16). It was

quite at the right time since black Friday was close. This design might incentivize the user to explore the offer section and buy using the discounts.

Ricevi tutte le promo Cyber Week e Black Friday: seleziona "Offerte e promozioni" nelle tue preferenze newsletter

Fig. 16. Banner with offers for subscribers

Free suggestions about outfit inspiration (Fig. 17) even if not tailored to the customer tastes and not related to the section browsed, jewelry, in this case, might have been designed with the idea of inspiring the user while showing items that were not of first interest to them but can be attractive and ultimately lead to purchase.

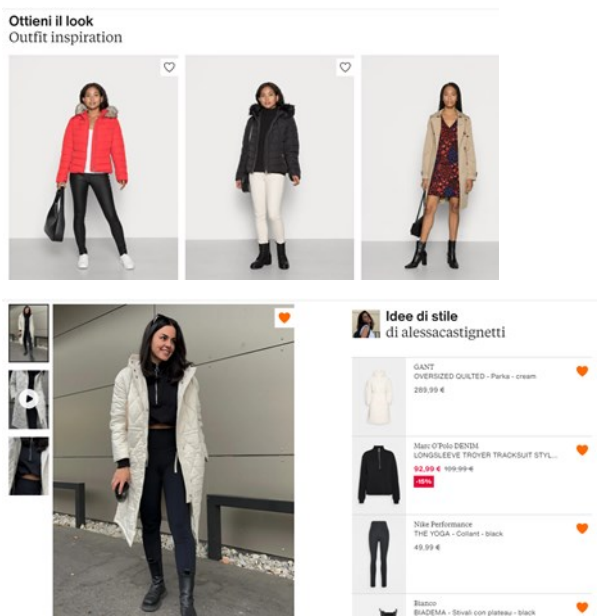


Fig. 17. Outfit inspirations offered by Zalando

## Tailoring

In this case, the tailoring process relies on customers' tastes assessed through product-filtering (Fig. 18) and previous choices (Fig. 19) so that the items displayed are of customer's interest.

Furthermore, customers are asked to give some feedback (Fig. 20) about service quality to change it accordingly to their needs.

This feature may also be linked to the principle of *liking* and being organized to let the customer perceive a feeling of inclusion in the process of service provision. By doing so, designers may influence customers' brand perception, which, in turn, can impact purchases.



Fig. 18. Options provided to filter product search

**Prodotti simili**

Potrebbe piacerti anche:

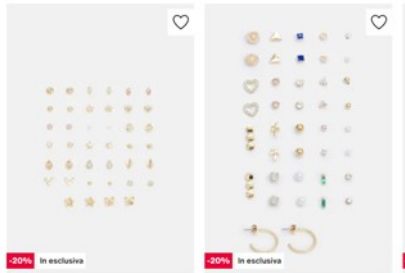


Fig. 19 Products displayed based on previous choices



Fig. 20. Request to give feedback to the service

**Reduction**

By providing the possibility to like an item, the customer is facilitated when they need to go back to products of interest, by simply clicking on the heart, highlighted by the orange number (Fig. 21), where all products have been saved.



Figure 21. Buttons that direct the user to personal information like items, and charts.

**Tunneling**

Every action the customer needs to perform is ordered into steps, both for purchasing (Fig. 22) and returning an item (Fig. 23).



Fig. 22. The purchasing process in a step-by-step fashion

**Come posso restituire il mio ordine?**



Fig. 23. Product return process

## Conditioning

As soon as you enter the Zalando Privè community which provides the user with more discounts than those offered to Zalando ordinary customers, the brand gives the customer a discount to thank them (Fig. 24). This design may increase loyalty to the brand and purchases.



Fig. 24. Discount offered to new customers

## Surveillance

Based on previous activity, customers are offered items similar to those already seen to which an additional discount is applied (Fig. 25). Also strictly linked to the principle of *tailoring*, this design may increase the possibility for the customer to find something they like and buy that, provided they have been given a discount.



Fig. 25. Item is shown based on previous activity

### 3.1.3. Banco Posta

#### Reduction

BancoPoste offers you to link personal online accounts to mobile apps and operate from there (Fig. 26), which, from a user perspective, might be easier than going to the post office or proceeding through the dedicated webpage.

From the personal area of the account, users can select the services they need and will be directed to the dedicated section (Fig. 27)

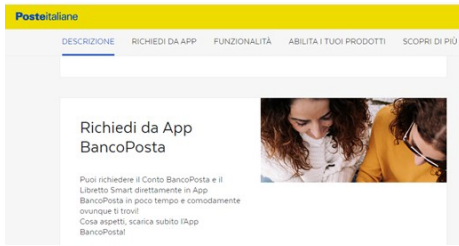


Fig. 26. Option to use BancoPosta from app

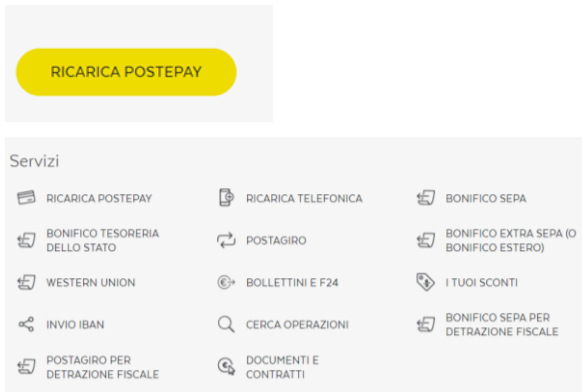


Fig. 27. Selection of the needed service using a button

### Suggestions

In the personal area of the bank account, users are offered the opportunity to ask for help to consultants or find out more about the service they are interest in through a series of related questions (Fig. 28).

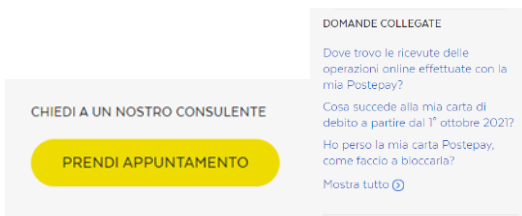


Fig. 28. Button to book an appointment

### Tunneling

When confirming personal data for “Libretto online” there is a step-by-step procedure (Fig. 29), that helps the customer to see the procedure as ordered and guided.



Fig. 29. The step-by-step process for personal profile formation



### Self-monitoring

Opening a “Libretto Smart” or having a “Postepay Evolution” provides you with the benefit of linking them to a “piggy bag”. If you activate this option you can self-monitor (Fig. 30) the amount of money you are saving for a goal you have pre-programmed.

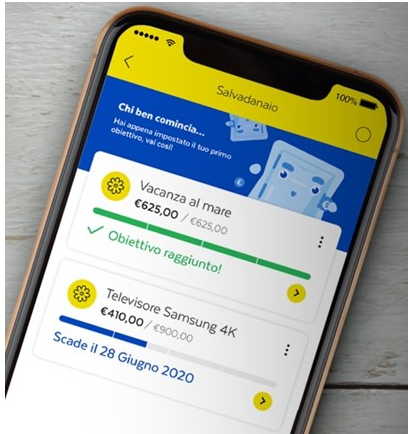


Fig.30. Self-monitoring plan for saving up money

### Surveillance

Poste Italiane cookie policy declares that information is taken from users' behavior to better the user experience. It also informs the user they keep track of their last use of the service (Fig. 31).



Fig. 31. Monitoring of user activity on the website.

### Tailoring

Suggestions offered by BancoPosta are rather general and not tailored to the services mostly used by the customer (Fig. 32). It is designed as a display of the different services BancoPosta offers.

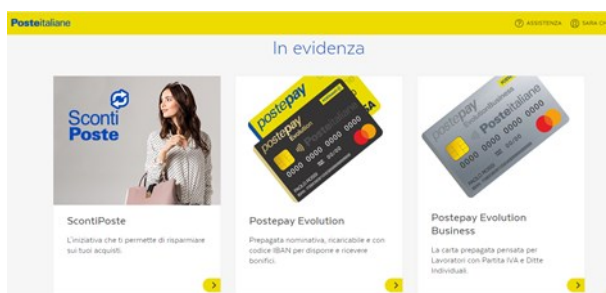


Fig. 32. Offers done by Bancoposta to their customers

### 3.1.4. ING Direct

#### Tunneling

The website provides proper step-by-step instructions (Fig. 33) to activate the account. This design gives the idea of a guided process for a task that will require a monetary investment which may be a reason for distress.

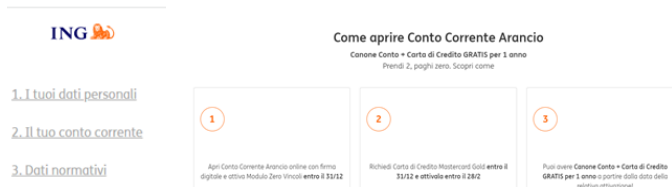


Figure 33. A step-by-step process for account activation

#### Reduction

After providing information on the benefit of opening this bank account, they designed a button, made evident by the orange coloring, that sends the customer directly to the procedure (Fig. 34) which facilitates the user experience. Furthermore, by providing the possibility of paying with the phone (Figure 35), clients do not need to bring their credit cards with them and this facilitates payments.

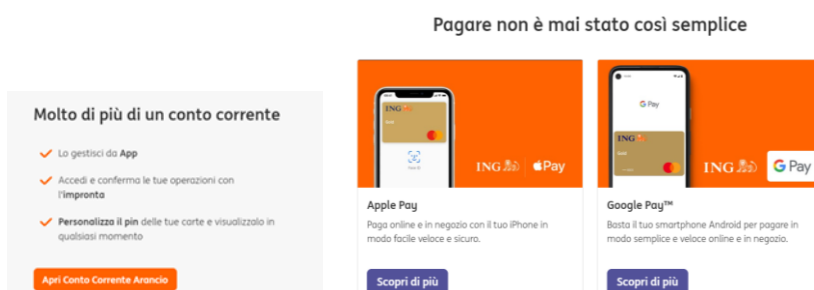


Figure 34. Examples of the reduction technique applied on ING Direct

#### Suggestions

The first goal of the agency is to lead customers to the activation of a new bank account, but given that every customer has personal reasons for doing so, the agency provides different useful information right before illustrating their services. This information is compartmentalized and easy to use (Fig. 35). This design may incentivize browsing, so to give the customer the possibility to get to know the service, and potentially buy it.



Fig. 35. Information provided on the first page of the ING banking website

### Tailoring

When looking for information in a specific area, as in this case, cashless payments (Fig. 36), they provide further useful information to which the customer might be interested into given that they have selected this specific area.

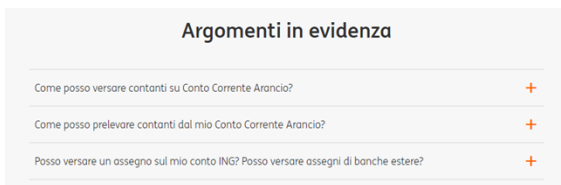


Fig. 36. More information provided on cashless payments

### 3.1.5. Ministero Della Salute.

#### Tunneling

To print green pass certificates you go through a series of guided steps as shown by Figures from 37 to 40.

#### Step 1. Certify your digital identity



Fig. 37. Certification of personal digital identity

#### Step 2. Accept data treatment



Fig. 38. Accepting information treatment

### Step 3. Choose the certificate to be printed


Tipologia ↑↓	Data ↑↓	AUTHCODE	Scarica PDF	Scarica QRcode
Vaccinazione	20/08/2021	BJQNERBNVQDB		
Tampone antigenico rapido	02/08/2021	XNNZNIKVHKRT		

Fig. 39. Choose certificate to print

### Step The downloaded your certificate

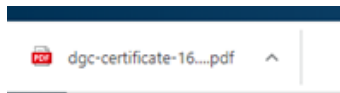


Fig. 40. Final download

### Reduction

Just before accessing the dedicated section of the page where to print your green pass certificate, there is a series of links that facilitate choosing the best option for the user.

La Certificazione verde COVID-19, in Europa "EU Digital COVID Certificate", è rilasciata in Italia dal Ministero della Salute in formato digitale e stampabile.

- [Tramite questo sito](#)
- [Tramite il Fascicolo Sanitario Elettronico](#)
- [Tramite App](#)
- [Recupera AUTHCODE](#)
- [Con l'aiuto di medici di medicina generale, pediatri di libera scelta, farmacie](#)

Fig. 41. List of options for the user to choose from

### Suggestions

Just before accessing your area to print the green pass certificate, there is a series of useful information with the dedicated link to find out more (Fig. 42 ) which is an incentive for the user to get informed about the usefulness of the certificate they obtained.



CHE COS'È

È una Certificazione in formato digitale e stampabile, emessa dalla Piattaforma nazionale del Ministero della Salute, che contiene un QR Code per verificarne autenticità e validità

[Scopri di più →](#)

Fig. 42.. Useful information provided to the user

### 3.1.6. Agenzia per l'Italia Digitale *Tunneling*

Documents and tasks to be filled are presented to the receiver in a well-organized and stepped way (Fig. 43)



Fig 43. Step-by-step process to request your digital identity

### *Reduction*

As soon as action needs to be fulfilled, a button (Fig. 44) that leads to the dedicated information helps the customer and speeds up the procedure.

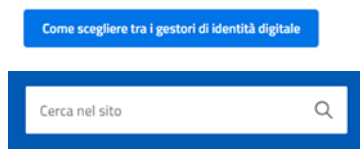


Fig. 44. Button to browse through different options

### *Suggestions*

Providing information in advance about the documents that citizens need to fill out (Fig. 45), might be very useful from the consumer's point of view since it can lead to faster procedures and less bureaucratic problems.

Furthermore, designing a dedicated section with the proper widget to check where the SPID can be used (Fig. 46), gives an idea of how useful fulfilling this task might be and informs them in advance about occasions in which a SPID identity is necessary.

#### **Documenti necessari**

Prima di attivare SPID, assicurati di avere a disposizione:

- un documento italiano in corso di validità (carta di identità, patente, passaporto);
- la tua tessera sanitaria (o tesserino codice fiscale, o il certificato di attribuzione di uno dei due);
- la tua e-mail e il tuo numero di cellulare.

Fig. 45. Information about necessary documents for the procedure

### Dove utilizzare SPID

Con SPID puoi accedere ai servizi online delle amministrazioni italiane.

Non solo. Con la tua identità digitale puoi accedere ai servizi online del piano dell'Unione Europea che hanno aderito al [paese digitale](#) italiano e delle aziende che hanno scelto SPID come strumento di autenticazione per l'accesso ai propri servizi.

Naviga tra le categorie e usa la barra di ricerca per scoprirle.

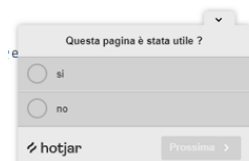
#### Cerca per servizio e territorio

Es: Esp e 730  Tutto il territorio

Fig. 46. Additional useful information about digital identity is provided to the user.

## Surveillance

The institution tries to track citizen satisfaction with the information provided to change it if the feedback is negative as shown in Figure 47.



Questa pagina è stata utile ?

si

no

hotjar

Prossima >

Figure 47. The request for feedback from the user

## 4. Applying Cialdini's seven principles of persuasion on E-services web pages.

After it has been shown how Fogg's 7 principles for persuasive technologies were applied on the web page of different types of e-services, the following part will be devoted to the identification of Cialdini's 7 principles of persuasion on the web pages previously analyzed.

Also in this case we will use taxonomy (Fig. 48) to quickly recall the definition of the principles considered.

Liking	People have more positive attitudes towards those that are similar to them, pay them compliments or cooperate with them.
Reciprocity	People feel obliged towards those they received a favour from
Consistency	Refers to people's tendency to behave in a manner that matches their past decisions or behaviours
Social proof	People are guided by other people's behaviour in performing an action
Authority	A perceived high-authority status of the person making a request can make people more compliant with that request.
Scarcity	People tend to assign high value to things they perceive as being less available
Unity	People are prone to comply to people with whom they share an identity

Fig. 48. Taxonomy of Cialdini 7 principles of persuasion

	Amazon	Zalando	Banco Posta	ING Direct	Ministero della salute	Agenzia per l'Italia digitale (agid.gov.it)
Liking	x	x	x	x	x	x
Reciprocity	x	x	x	x		
Consistency	x	x		x		
Social proof	x	x		x	x	x
Authority	x	x		x	x	x
Scarcity	x	x		x		
Unity	x	x	x	x	x	x

Fig. 49. Summary table of Cialdini's persuasive principles present on the different e-services' web pages.

### 4.1 Amazon

#### Liking

The principle of liking is based on sharing something with people we like and perceive as similar to us. Using that as a grounding rule, Amazon shows customers articles that other people, with similar purchasing choices, bought in

the past (Fig. 50). This feature may push the client into browsing and maybe increase the chances of a second purchase.



Fig. 50. Items showed based on other customers' choices

Furthermore, Amazon's choice of offering correlated articles (Fig. 51), might have been designed with the intent of facilitating the process of deepening customers' knowledge on a topic they showed interest in, as in this case (Fig. 51) vegan cuisine, by showing other similar articles that they wouldn't have ever seen otherwise. This particular feature may be designed to let the customer feel facilitated in their research on a particular topic.

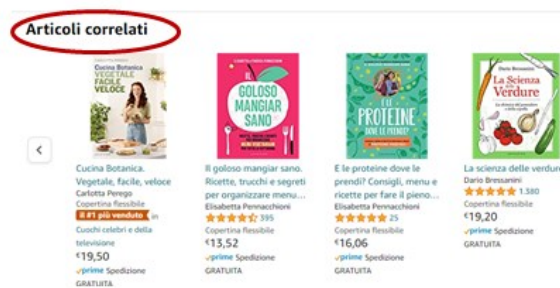


Fig. 51. Articles related to the topic of customers' interest

### Reciprocity:

Amazon exploits the principle of *reciprocity* by offering a free trial (Fig. 52) so that the customer has a period to test the potential of the offer and after this free trial might be more likely to reciprocate by submitting or paying for the service.

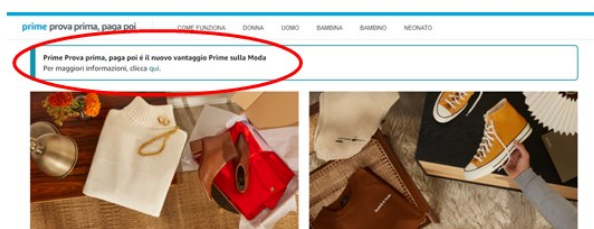




Fig. 52. Offer for a free trial

The very first result when searching for Amazon is the offer for first free shipping (Fig. 53). This particular feature might have been designed to get the user's attention and engage them at the very beginning of the user experience, guiding them to browse the website.



Fig. 53. Offers displayed directly under the website link

The *principle of reciprocity* may also stand for doing favors to the customer to let them feel appreciated, such as greeting them (Fig. 53) when they come back on the page or creating a section of pre-selected articles according to the customer's previous choices.

Also, offering the opportunity to read the first chapter of the book (Fig. 54) before buying it, might be a feature designed with the intent of engaging users' attention by doing them a favor which they might feel tempted to reciprocate. This may also be consistent with the fact that people need a certain degree of certainty of product quality before committing themselves to buy it (Cialdini, 2006).



Fig. 53. Greetings to the customer



Fig. 54. Opportunity to read the first chapter

### Consistency

After a free-trial period (Fig. 55), a customer that has also liked the product may feel the need to be consistent with their previous behavior as a user. This

particular design may increase the chances of them buying the product or submitting it.

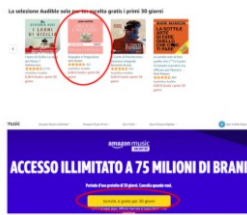


Fig. 55. Free trials are offered to the user.

Furthermore, If you do not complete your order, there will be a reminder on the side of the homepage (Fig. 56) which plays with the need to be consistent with your previous action. This particular design may push customers to complete the order.



Figure 56. Sidebar reminder to complete your purchase

### *Social proof*

According to Cialdini (2006) before embarking on something, as in the case of a purchase, we look for security. Seeing that other people who bought the product we wanted were satisfied, reassures us and motivates us into completing the purchase. Amazon employs with this purpose a particular visual feature: stars used to express other customers' satisfaction and leaves space for customers' reviews (Figure 57).

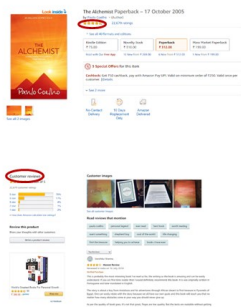


Fig. 57. Tools to express other customers' opinions on a given product

### Authority

Amazon is in itself an authority when it comes to product quality, fast shipping, and best deals. For this reason, the brand reminds that by adding badges with Amazon's logo near the product displayed on the page (Figure 58).



Figure 58. Amazon displays its authority through badges to guarantee customer satisfaction

### Scarcity

According to the idea that products seem to become more attractive when their availability is perceived as limited either in time or in quantity, showing the lack of product availability (Fig. 59), maybe a feature that incentivizes people to promptly buy the item of interest.

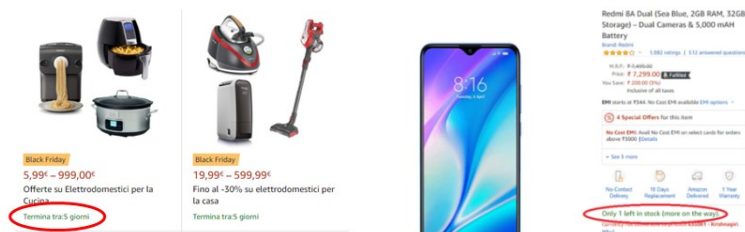


Fig. 59. Lines to show product scarcity

### Unity

This new principle is built on the idea of shared identities and similarities with people that have the same interests, by forming a group that provides you with consistent benefits simply by joining it. The feature that work on this principle is the design of Amazon Prime membership (Fig. 60).



Fig. 60. Showing unity through Amazon Prime Membership

## 4.2 Zalando

### Liking

Offering help for something that may be a customers' fear when buying online, as in this case (Fig. 61) choosing the perfect size, might be a feature designed to put customers at ease and encourage people to trust. Furthermore, the offer to stay updated with the latest news of a brand (Figure 61) might have been designed with the intent of engaging with the customer, showing items of their interest, and increasing brand loyalty.



Fig. 61. Examples of how Zalando offers help to customers

### Reciprocity

By providing discounts (Fig. 62), the brand encourages customers to purchase, since it may be interpreted as a favor they need to return.



Fig. 62. Special discounts provided to customers

## Consistency

Highlighting the number of items in the cart (Fig. 63) is a feature that works as a reminder for the customer to be consistent with their previous choice of putting it into the cart and may push them to go through with the purchase.

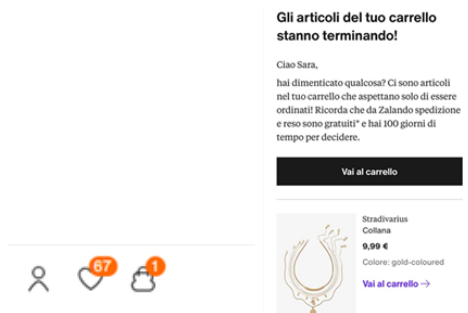


Fig. 63. Reminders to be consistent with previous actions

They may also send you an e-mail (Figure 63) saying that the item you chose is almost out of stock. By doing this, which is also linked with the *principle of scarcity*, they push customers to finalize the order. Since they know they put users under pressure by doing so, they also try to reassure them by guaranteeing free shipping and return within 100 days. This feature is also linked to the principle of *reciprocity*. On one side they invite you to be consistent within a limited amount of time but on the other, they are also trying to buy your trust with special offers.

## Social proof

By reading and seeing how previous buyers rated the product (Fig. 64), a potential customer may feel more comfortable purchasing it.

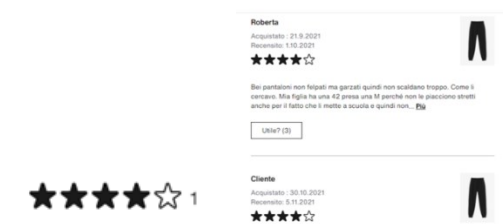


Fig. 64. Display of other customers' ratings on the products

### Authority

The brand ambassadors chosen by Zalando (Fig. 65) reflect the values of the brand, in this case being fashionable and trendy, and may be of inspiration for potential customers. Brand perception might change accordingly with the positive feeling people have towards the famous person.

In the field of fashion, if the brand ambassador is generally recognized as an icon, people may want to feel trendy as they are and act on this desire by buying items the brand ambassador is sponsoring.



Fig. 65. Brand ambassadors chosen by Zalando

### Scarcity

Different discounts with fixed expiring dates (Fig. 66) may motivate the customer to buy faster even if the item is not strictly necessary.

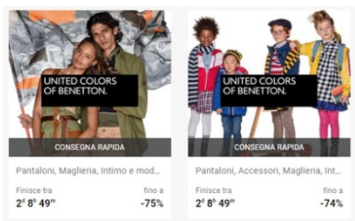


Fig. 66. Time-limited offers

### Unity

Feeling of inclusion and acceptance is important. Showing people of different ages and skin color (Fig. 67) may be a technique designed with the intent of letting everyone feel part of the community and this particular choice may incentive the purchase thanks to feeling appreciated and part of a group.

Also, focusing on current people's concerns, as in the case of sustainability, (Fig. 67) might be a feature designed with the idea of letting every customer feel their opinion is considered and accepted.

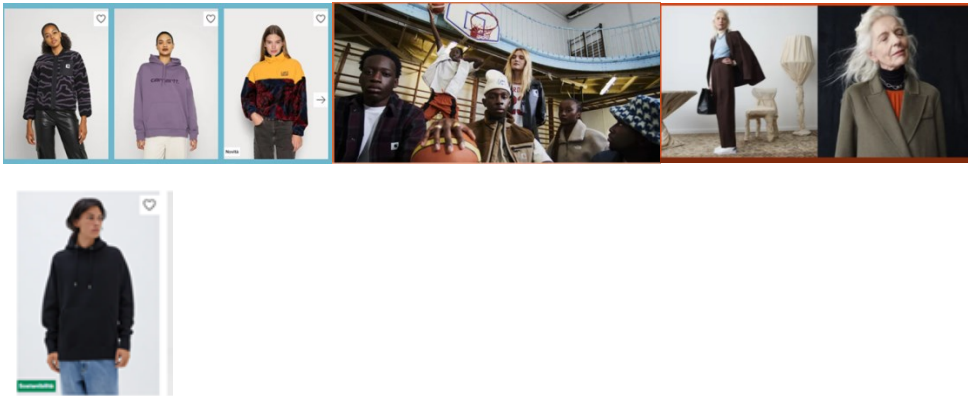


Fig. 67. Example of inclusion of different types of customers

### 4.3 BancoPosta

#### Liking

Showing smiling faces (Fig. 68) on the homepage might be a technique to get the user's attention and at the same time, may give them the possibility to identify with one of them, considering that almost any age range has been represented. As soon as the customer enters the personal area they are given the possibility to directly contact their personal assistant (Fig. 69). This suggestion, especially in a time of need, may enhance positive attitudes towards the service.

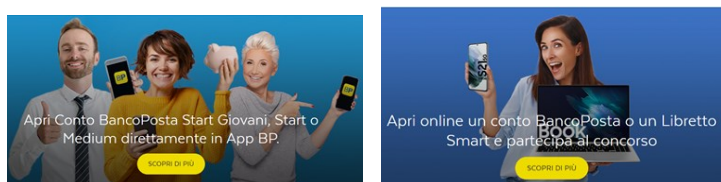


Figure 68. people displayed on the web page



Fig. 69. Option to contact your consultant

### Reciprocity

As soon as the user enters the personal area, on the side, there is this offer (Fig. 70) that allows the customer to choose the best modality to ask for further help. This widget might be designed with the intent of letting the customer feel supported by the service, providing more reasons to engage with it.



Fig. 70. Offer for further help provided to the customer

If the user subscribes to the “Accumula e Vinci” saving plan they will be given the possibility to take part in a lottery with a prize (Fig. 71). This feature may incentivize customers to subscribe, attracted by the possibility of winning.



Fig. 71. The offer did to the customer to incentivize subscriptions

### Unity

The word “insieme” (together) (Fig. 72), might have been employed to create a feeling of inclusion with the intent of letting the customer feel part of the service and providing more reasons to fill in a questionnaire designed to guarantee users a better service.





Fig. 72. Asking for feedback to improve the service

## 4.4 ING Direct

### *Liking*

By designing different tabs on the web page like the one shown in Figure 73 which offer the users continuous opportunities to ask for help, they may create a positive attitude towards the service.



Fig. 73. Offer to help customers

### *Reciprocity*

By designing the offer of a free trial (Fig. 74), they may attract potential customers that after the year has expired might reciprocate the offer done by the service by subscribing and paying for it.

### Conto Corrente Arancio

Canone conto + Carta di Credito GRATIS per 1 anno!

Apri Conto Corrente Arancio

Fig. 74. Offer for a free trial

### *Consistency*

Clients are reminded of the status of their activation (Fig. 75). This can be interpreted as a reminder to be consistent with the previous action of initiating the operation.



Fig. 75. Reminder to complete the request to open a bank account

### Social proof

New potential customers that are still indecisive may subscribe to the service simply because they notice that other people like them already did so, are satisfied, and provide positive feedback (Fig. 76).



Fig. 76. Video of a satisfied customer

### Authority

By showing the awards they obtained in their field, also for those values the company shares (Fig. 77) they are presenting themselves as authorities with experience in the area.

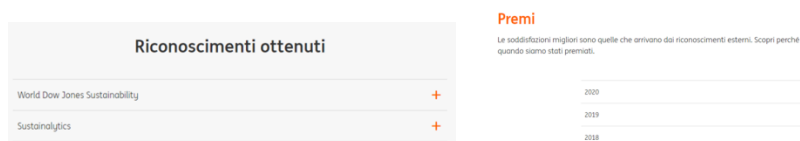


Fig. 77. Authority expressed by showing prizes won in the field

ING Banking employs the *principle of authority* by citing an external security service they use to guarantee customers' data protection (Fig. 78). This reassures users and may increase the number of subscriptions.

**Accesso Cliente**

**Come accedere**  
L'insertimento dei codici di accesso è diviso in due pagine separate: nella prima inserisci il Codice cliente e la data di nascita, nella seconda il PIN.

**Sicurezza**  
Nella seconda pagina vedrai visualizzate alcune informazioni sul tuo account che solo ING può conoscere, a conferma del fatto che ti trovi sul sito ufficiale di ING e puoi inserire il PIN con tranquillità.  
In questo modo i tuoi codici sono doppiamente protetti:

- **dal phishing:** se non trovi le informazioni sul tuo account, non sei sul sito di ING ma su un possibile sito contraffatto;
- **dallo spyware:** la tastiera digitale impedisce che il pin sia memorizzato da eventuali programmi di spyware presenti sul tuo pc.

**Come proteggiamo i tuoi dati**  
I dati che inserisci e le transazioni effettuate sono protetti da crittografia a 128 bit certificata da Verisign. Per ulteriori informazioni visita la [sezione sicurezza](#).

Fig 78. Assuring data protection through an authority in the field

## Scarcity

Allowing to subscribe only until 31/12 to have a one-year free trial (Fig. 79) may be a technique employed to incentive subscriptions without delays by the users.

**Carta di Credito Mastercard Gold**

Canone GRATUITO per 3 anni: richiedi Carta di Credito Mastercard Gold entro il 31/12.  
Fai acquisti online e paghi in tutto il mondo con un semplice gesto.  
In più con Popflex acquisti quello che desideri e paghi a piccoli passi.

[Scopri di più](#)



Fig. 79. Limited offer for subscribing with one-year free service

## Unity

Setting up a page dedicated to the description of the agency and their values (Fig. 80) contributes to customers getting to know the body they are investing into and at the same time, they may also notice if they share some values, like the one highlighted in this case: sustainability (Fig. 80). This may incentivize potential customers to subscribe because of perceived similarity, an idea shared with the *principle of Liking*. Building up a good presentation page is of great importance to state the positive values of the company that potential future customers may share which can be a reason for the subscription.

**Chi siamo**  
Partner affidabile per milioni di clienti corporate e retail, ING è attiva in Italia con le due business line Wholesale & Retail Banking.

**ING Italia in breve**

- Oltre 1.300.000 clienti tra retail e wholesale
- 450.000 clienti nella nostra social community
- Oltre 2.300.000 App scaricate
- 20 punti Retail (da Ancona Store a ENA Milano)
- Tra le migliori banche per API (Indice di raccomandabilità dei clienti)
- Più di 3000 dipendenti

**ING Group in breve**

- 1616 milioni USD (1.616 miliardi) di ricavi nel 2020
- 1071 milioni USD (1.071 miliardi) di ricavi nel 2019
- Oltre 57.000 dipendenti
- Oltre 10 mila filiali in tutto il mondo
- Rating A+ per Fitch (05/03/21)

**ING e la sostenibilità**  
Limitare l'uso delle carte? Riciclare? Non ci basta. Perché essere sostenibili non è solo ridurre l'impronta sull'ambiente. Vogliamo essere protagonisti del cambiamento ambientale, economico e sociale. Con ING Phosphorus e finanziando un mondo sempre più sostenibile.




Fig. 80. Presentation page of the agency

## 4.5 Ministero Della Salute

### *Liking*

The idea of cooperation with citizens is briefly expressed by providing a number for customer service (Fig. 81).

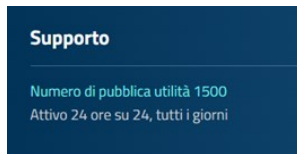


Fig 81. The number for customer service

### *Social proof*

Since people are guided by other people's behavior, showing the number of green pass certificates printed (Fig. 82) may have an influence on both people getting vaccinated and after that, printing the certificate.

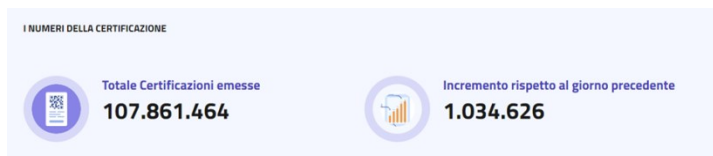


Fig. 82. Data of green certificates issued

### *Authority*

By showing the logos of different important Institutions in Italy (Fig. 83), they are providing the user with the necessary information to trust the data provided and validate the general thesis of getting vaccinated.



Fig. 83. Logos of different authoritative Italian Institutions

### *Unity*

The first thing users see on the homepage is a statement that calls people to action: getting vaccinated and using the green pass certificate to guarantee a social and economic re-start (Fig. 84).

This plays on the feeling of being active citizens and part of the European Union.

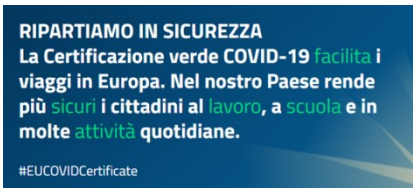


Fig. 84. Slogan to boost the feeling of belonging as a citizen

## 4.5 Agenzia per l'Italia Digitale

### Liking

The tab for offering help (Fig. 85), which doesn't require proper tailoring on customers' needs, may be interpreted as a favor done by the Institution to citizens and as a consequence provide the consumer with more confidence to proceed in the activation of the SPID identity.



Fig. 85. Offers for help to the customer

### Authority

Applying the Logo of the Ministero Italiano (Fig. 86) contributes to giving a sense of safety to citizens looking for information on the website and may also contribute to the actual fulfillment of the SPID activation since it is asked and guaranteed by the Ministry.



Fig. 86. Official Ministero Italiano Logo near the service description

### Unity

By giving the possibility to join a Facebook group (Fig. 87), people that haven't already activated SPID may feel more confident in doing so, knowing that there will be a group of people, similar to them, with whom to share their concerns and thoughts about the service.



Fig. 87. Link to a Facebook group of people that have already activated SPID

## Social proof

By sharing the number of SPID identities activated (Fig. 88), citizens that haven't already activated their own might feel motivated to do so, not just by complying with Ministero's guidelines but also by knowing that other citizens did so and started using their SPID.

### La diffusione e l'utilizzo effettivo dello SPID

Il numero di identità SPID rilasciate è consultabile sul sito [Avanzamento trasformazione digitale](#)

Di seguito la media **settimanale** delle identità rilasciate:

- nei primi cinque mesi 2020 circa 76 mila identità;
- nei successivi sette mesi 2020 circa 262 mila identità;
- nel mese di gennaio 2021 circa 261 mila identità;
- nel mese di febbraio 2021 circa 216 mila identità;
- nel mese di marzo 2021 circa 218 mila identità;
- nel mese di aprile 2021 circa 279 mila identità;
- nel mese di maggio 2021 circa 188 mila identità;
- nel mese di giugno 2021 circa 139 mila identità;
- nel mese di luglio 2021 circa 208 mila identità;
- nel mese di agosto 2021 circa 183 mila identità;
- nel mese di settembre 2021 circa 186 mila identità.

Fig. 88. Data display of active SPID identities.

## 5. Conclusions

This work aimed to identify which kind of persuasive technology is applied to the design of different web pages according to the service provided.

Let's first discuss Fogg's persuasive tools present in the three different e-service subcategories. As summarized in Figure 4, the two services chosen for the e-commerce section (Zalando and Amazon) show six out of the seven functional persuasive tools. Only self-monitoring has not been identified. This can be considered a sign of a design focused on building the entire experience around the user, by anticipating their needs and making the purchase experience easy and pleasurable.

For the e-banking category, differently from ING Direct, Banco Posta offers the opportunity to keep track of personal savings if a goal has been pre-set by the consumer. On the other hand, ING Direct shows one example of tailoring useful information to the user based on the dedicated service area they selected. Apart from this difference, both the e-services show examples of tunneling, reduction, suggestion, and surveillance: four out of the seven tools suggested by Fogg.

When it comes to the e-government subcategory, only three out of the seven tools are observed for both Ministero Della salute and Agenzia per l'Italia Digitale: tunneling, reduction, and suggestion. In addition to those shared, Agenzia per l'Italia Digitale shows also overt examples of surveillance.

Moving forward to Cialdini's seven principles of persuasion observed in the same three subcategories, it can be noticed, as summarized in Figure 51, that for the two e-commerce chosen, examples of all the seven principles were present.

When it comes to the e-banking section, we can notice a discrepancy between Bancoposta, which is a service provided by Poste Italiane, originally born offline as a state service, and ING Direct, born as an online service. Bancoposta shows examples of only 3 out of the seven principles: liking, reciprocity, and unity. On the contrary, ING Direct shows the application of all of the seven persuasive techniques described by Cialdini, being more similar to the design tailored on the user shown by the services in the e-commerce subcategory.

Lastly, in the e-government subcategory, both Ministero Della Salute and Agenzia per l'Italia Digitale show examples of four of the seven principles: liking, social proof, authority, and unity.

Overall, from the results of this work, it can be said that the subcategory of e-services that majorly implements the persuasive tools described by both Cialdini and Fogg is e-commerce. This meticulous attention to the design might be given to the elevated competitiveness between the e-commerce services a user can choose to buy a given product. This can lead each service to develop new tools to capture and maintain customers' attention when it comes to purchasing items that are not of primary necessity.

On the other hand, the e-government subcategory, despite being fairly homogenous in the quality of tools used, seems to be the e-service category that implements fewer persuasive tools. This, limited to the e-services analyzed, might be given to the fact that tasks such as activating digital identity or downloading the green pass certificate need to be completed by citizens out of government requirements. There is not much choice of online platforms to complete these tasks. This lack of competitiveness for a service that is necessary to the citizen can lead to a minor need to guarantee a pleasurable and complete experience to the users.

When it comes to the discussion of limitations, it can be said that this work offers a schematic overview of the kind of persuasive tools and techniques observed on different web pages according to the service they provide and the task the customer needs to complete but it is not exhaustive because it only takes into consideration two services for the three subcategories and different tasks to perform for each. For this reason, it does not provide an in-depth analysis that takes into consideration possible differences among the types of e-services chosen within the same category, such as being a private or public institution, being a long-term enterprise or a newly formed start-up, the type of resources they have, their aim or their philosophy. This further subcategorization may affect the persuasive techniques used. By taking into consideration more specific aspects, the quality of the analysis can be improved and become more informative.



Even though there is room for improvement, this work might be considered a first attempt to find practical examples of the persuasive tools described in the literature on the web pages of different e-services.

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