

Diffusion and (mis)perception of internet trust marks in Germany and Italy – a comparative empirical analysis

ABSTRACT

Trust marks for online shops have been subject to intense research ever since their introduction in the USA in 1997. The vast majority of empirical research has its focus on national trust marks schemes, which come from a selected country – mainly the USA. Comparative studies about trust mark schemes from various countries and in particular cross-cultural comparative studies operating in more than one country are rare or not existent. This paper addresses this research gap by comparing the diffusion and perception of the most important trust marks in Germany and Italy. Two of the examined trust mark schemes (Trusted Shops and Ecommerce Europe) are operated in both countries.

The analysis was carried out with the help of an empirical study executed in both countries. A total of 598 online shoppers (381 in Germany, 217 in Italy) were surveyed with an identical questionnaire and a website analysis of the most frequented online shops in Germany and Italy was performed.

The results show significant differences regarding the diffusion and the recognition of trust marks by the study participants. Both diffusion and recognition were higher in Germany, including the schemes operated in both countries. At the same time, the study revealed great similarities regarding the (mis-)perception of the content of the analyzed trust mark schemes. In both countries, online shoppers showed an inadequate understanding of such certification, which means that trust marks currently do not fulfill their purpose, namely the generation of justified trust. The major implication for researchers and practitioners clearly lies in the development of measures to improve the correct perception of trust mark schemes. The authors' proposal is comprised of a new mindset for the development of trust mark schemes, using an outside-in approach instead of the prevailing inside-out approach.

1 INTRODUCTION

Among the various trust intermediaries used by online retailers to engender trust among (potential) online shoppers, trust marks belong to the most long-standing and widespread mechanisms. Since the introduction of the first trust mark in the USA in 1997, a large number of different mainly national trust marks emerged in each country. Researchers described the situation as a "jungle", "maze" or "glut" of internet trust marks (Rüdiger 2008). Although many publications incurred up to now, their focus lies nearly exclusively on trust marks in the USA. Research on trust marks in European countries and cross-cultural comparative studies of trust mark schemes operated in more than one country are rare or not existent. As "the trust features of trustmark services are extremely diverse" (European Commission 2012, p. 4) and refer strongly to the national legislation, the results of studies of US-American trust marks cannot be easily generalised. This paper addresses these research gaps by comparing the diffusion, awareness and perception of trust marks in Germany and Italy, including two pan European trust marks. Germany is a high trust country with a strong online retail sector and a high number of different trust marks with a widespread diffusion, whereas Italy is a low trust country with an under average developed online retail sector, and from the beginning on with comparatively few trust marks (European Commission 2012, Fukuyama 1995).

2 ONLINE SHOPPING AS AREA OF APPLICATION OF TRUST MARKS

2.1 Facts about online shopping in Germany and Italy

Even though study results on online shopping (B2C E-Commerce via the Website) differ due to different survey methods, a coherent picture emerges regarding the importance of online retailing in the countries surveyed. Germany is the largest EU online shopping market; whereas Italy's online shopping values are below average. In 2019, about 71% of the German population bought online and generated sales of 59.2 billion Euros, which represented for 11% of retail sales. In the same period only about 28% of Italians bought online. Online turnover amounted to 31.4 billion Euros, which represented 4% of total retail sales (Statista 2019b; Statista 2020a; Statista 2020b; Statista 2020c). In both countries, consumers tend to make their online purchases via a very few, well-known retailers, which has led to an extreme market concentration. In Germany, the top ten online shops generated in 2019 about 40% of all online sales. Only amazon.de, otto.de, and zalando.de, the three largest online shops by turnover, achieved sales of nearly 14 billion Euros in 2018 (Statista 2019a; Statista 2020a). In Italy, the top five online retailer accounted for 37% of the net sales of the top 250 online shops in 2019. Only the three largest online shops by turnover (amazon.it, zalando.it and apple.com) achieved sales of nearly 3.8 billion US Dollars (ecommerceDB 2020).

2.2 Perceived risks involved in online shopping

The facts about online shopping, especially the share of total retail turnover, show that there is still enormous potential for growth in online trading which so far remains unfulfilled. A central explanation for the hesitation by customers to buy online are the uncertainties and particular risks involved in online trading and the resulting lack of trust this engenders among consumers. Various studies have shown that both potential online buyers (internet users, non-buyers) as well as online buyers are aware of the following risks involved in online trading: privacy risks, IT security risks, difficulty in assessing the reliability of the retailer, difficulties in assessing the goods & services and fulfilment risks (Rüdiger 2008; Daroch 2021). The most recent Eurobarometer study confirms these findings: "Concerns about online privacy and security have caused 93% of respondents to change their behaviour in some way, [...]. Almost one third (32%) say they only visit websites they know and trust." (European Commission 2019, p. 6).

3 INTERNET TRUST MARKS: CONCEPT AND FUNCTIONING

3.1 Definition and core elements of trust mark schemes

Despite intensive consideration of the topic on the part of research (Bauman, Bachmann 2017), the European Union (European Commission 2012) and national players from different countries (Rüdiger 2008), no uniform understanding of the term has emerged. Based on a comprehensive analysis of the literature, internet trust marks can be defined as follows: Internet trust marks are word and/or figurative marks issued by an independent institution, which online retailers can display on their websites as a sign of recognition, giving customers and potential customers in a compact form the assurance that the online retailer concerned fulfils certain criteria / (quality) requirements (i.e. codes of conduct, criteria catalogues, standards, guidelines, etc.) specified by the issuer with respect to his business practices, particularly with regard to information privacy, IT security and consumer protection (European Commission 2013; Rüdiger 2008).

Behind each trust mark stands an individual trust mark scheme, which can be categorised according to the following core elements (see in detail Rüdiger 2008): (1) The award criteria are the key element since they represent the requirements which an online retailer has to meet in order to be allowed to display the trust mark on his website. (2) The award procedure specifies how compliance with the award criteria is verified. The scope of the procedure varies widely from a self-evaluation with the help of questionnaires to an assessment of the retailer's website to thorough on-site inspection and test purchasing. (3) The enforcement actions include all measures that are pursued in the event of violation of the award criteria, e.g. sanctions like the withdrawal of the trust mark or legal actions.

3.2 Trust marks as a trust building institution

Trust marks assume the role of a trust intermediary. The basic concept is that the trust intermediary invokes a transference process of trust building from a known, trustful institution, here the trust mark and its provider, to an online shop, which in the eye of the potential customer cannot be trusted solely. Typically, this is the case when the online retailer is unknown and the consumer has no or little direct experience with the merchant. To establish trust in an online shop via the trust mark on the retailer's website, (potential) customers must be able to recognise the trust mark, and the overall concept of the trust mark scheme must be consistent with consumer interest: i.e. the award criteria must address the perceived risks of the (potential) online shopper and the scheme must contain credible compliance and enforcement mechanisms. This requires that the scheme must be well documented, and thoroughly read, and understood by consumers (Cook, Luo 2003). Although these requirements may seem obvious, they are essential to the trust-building process – and in many cases are not met in reality, as this analysis shows again. Trust always has a cognitive and an emotional basis, and a behavioural enactment (Luis, Weigert 1985). In the case of Internet trust marks, there is a clear preponderance of cognitive content as trust basis (Bauman, Bachmann 2017). As Simmel already stated in his 1908 influential work, trust is always an intermediate state between knowledge and ignorance (Möllering 2001; Simmel 1983). In situations of complete ignorance, there is no basis of trust (Luis, Weigert 1985). If online shoppers are not able to differentiate trust marks from other website labels (= awareness) and do not know for what the trust mark stands for (= perception), we would not speak about (justified) trust but about blind leap of faith (Rüdiger 2008). If so, consumers may place their trust in labels that they confuse with internet trust marks, or in trust marks that do not deserve the trust due to unknown weaknesses / gaps in the trust mark scheme. This could lead to harmful decisions, for example having tried to buy goods from a fake shop (For an in depth analysis of the concept of trust and trust marks see Rüdiger 2008).

4 EMPIRICAL RESEARCH / METHODOLOGY

4.1 Procedure

To measure awareness of the trust marks, respondents in both countries were shown a questionnaire with six labels: two pan European trust marks, two national trust marks, one fake trust mark and one SLL-seal. (see section 4.3 and table 2, p. 6). Respondents were asked to put a tick on those trust marks they recognised. Then, respondents were asked to identify the two trust marks, which would most increase their confidence in a website. To assess the understanding (perception) of each of the two selected trust mark schemes the "true – false – don't know" technique was used, see Table 1 (Rüdiger 2008).

Table 1. True-false-don't know statements

<i>Q1: For the trust mark in question, please indicate whether you believe the following statements are true or false, or if you are not sure.</i>	
	The trust mark ensures that ...
1	... the online shop complies with the data protection regulations.
2	... the online shop takes measures for data security .
3	... data transmission during payment is encrypted.
4	...the goods and services offered meet the legal requirements .
5	... the buyer can make use of an Alternative Dispute Resolution (mediation, arbitration, etc.) procedure if differences arise with the online shop.
6	The trust mark provider checks the content of the online shop website before the trust mark is awarded.
7	If the online shop is found not to comply with the criteria of the trust mark, and the buyer is harmed by this, the trust mark provider assumes liability for this.

So as not to overburden the participants, each respondent was only required to assess the two most trusted trust marks. Additionally, the respondents had to answer further questions concerning trust marks and their shopping behaviour (see the questionnaire in Rüdiger 2008, annex VII, questions A1, B1, B3, B4, C1, C2, C21, C22, C4, C5).

4.2 Data collection and sample characteristics

In 2018, surveys were carried out at the University of Applied Sciences Bielefeld, Germany and at the University of Cagliari, Italy. A total number of 598 students with online shopping experience in the last twelve months – 381 in Germany and 217 in Italy – were interviewed using the same standardised questionnaire. The sample does not necessarily represent the general online shopping population (lack of external validity / generalisability) – this nonetheless seems to be acceptable for answering the research question concerned. As empirical studies show, students are one of the mayor groups of online shoppers (Statista 2020b). With regard to age (on average 22.7 and 23.6 years respectively), and the proportion of male to female respondents (52:48 and 47:54 respectively) both samples were similar. Concerning the purchasing behaviour the samples show differences, which are in line with the findings in the empirical studies used in section 2.1. While in the Italian sample, 33% made more than 10 purchases in the last twelve months, in the German sample the number was almost twice as high at 61%. In Germany, 52% made purchases from no more than four different online shops over a period of a year; 92 % made their purchases from no more than ten online shops. In Italy, 73% made purchases from no more than four different online shops and 97% made their purchases from no more than ten online shops. Earlier empirical studies support these findings (Rüdiger 2008; Rüdiger, Rodriguez 2013). The top five online shops in Germany were amazon.de, zalando.de, asos.de, hm.com, ebay.de and in Italy, amazon.it, ryanair.it, zalando.it, ebay.it and alitalia.it. When the survey was conducted, the only shop with a trust mark was zalando.de (Trusted Shops).

4.3 Presentation and diffusion of the analysed trust mark schemes

When the survey was carried out, only two **Italian trust marks** were still in existence. Both of them were integrated into the study: (1) The Netcomm trust mark was launched in 2013 by the Netcomm consortium, which is the Italian member association of Ecommerce Europe. Since 2020, the standard trust mark can be extended to include customer reviews and ratings. In 2021, 264 online shops displayed the Netcomm trust mark, 49 of them additionally

displayed the Ecommerce Europe trust mark (Netcomm 2021). (2) The Federcomin trust mark scheme was launched in 2000 by Federcomin, a federation representing telecommunications, radio-television and information technology companies. The trust mark scheme was free of charge for its members, but was closed in 2021. (Federcomin 2007; Ferro 2001).

In Germany, more than twenty **German trust marks** could be identified (Schulz, Froschmeier, Rothhaar 2017). Two trust marks were selected because of their high recognition values in former studies and a high appearance among the top 100 online shops: (1) The trust mark “Geprüfter Online-Shop” exists since 1999 and it is offered by the EHI Retail Institute e. V. In 2017, 39% of the top 100 online shops were among the 700 certified stores. Recently the trust mark scheme is also offered in combination with customer reviews (EHI Retail Institute GmbH 2021; Rüdiger 2008; Schulz, Froschmeier, Rothhaar 2017). (2) The trust mark “safer shopping” was launched in 2001 by the TÜV SÜD Management GmbH. Since March 2021, no new certifications are offered; existing certifications are still supported. In 2017, 12% of the top 100 shops were among the 200 certified online retailers (Rüdiger 2008; Schulz, Froschmeier, Rothhaar 2017; TÜV SÜD 2021).

Additionally, the two **pan European trust marks** were integrated: (1) The Trusted Shops trust mark was introduced in Germany in 2000 by the German private company Trusted Shops GmbH. In 2013, the trust mark expanded into the Italian market (Business Community 2013). It is the only trust mark scheme, which is operated in nearly all European countries with 30,342 certified shops in Germany and 1,431 in Italy in 2021. In 2017, 55% of the German top 100 online shops had the trust mark on their website (Schulz, Froschmeier, Rothhaar 2017). Trusted Shops was the first trust mark provider who introduced a money back guarantee and who offered customer ratings and reviews, both for the shop and the sold products, as additional trust services (European Commission 2012; Rüdiger 2008; Trusted Shops Germany 2021; Trusted Shops Italy 2021). (2) The Ecommerce Europe Trustmark was introduced in 2015 by Ecommerce Europe. With 24 national associations, it is the major representation of interest of the European digital commerce sector (Ecommerce Europe 2021). Online stores that bear a trust mark from one of the national member organizations are automatically entitled to bear the Ecommerce mark as well, i.e. the Ecommerce Europe Trustmark is not a trust mark scheme on its own right, it cannot be displayed as stand-alone trust mark. When the written survey was carried out in Germany, the member association was the Händlerbund with its trust mark “Käufersiegel”. In 2017, 5000 shops were entitled to display the trust mark, among them not one of the top 100 German shops. (Ecommerce Europe trustmark 2017; Ecommerce Europe trustmark 2021; Schulz, Froschmeier, Rothhaar 2017).









Both questionnaires also contained a fake, non-existent seal with an identical design but a slightly different text in the national language, and the Norton SSL seal, which is not a trust mark as defined here. Both labels were included because they provide an indication of how well an online buyer can actually recognise or distinguish certain marks and labels on a website.

5 FINDINGS AND INTERPRETATION

5.1 Awareness

Both the national and the pan European trust marks received an increased awareness in Germany compared to Italy (see table 2, question Q1).

Table 2. Analysed trust marks / seals and their valuations

EHI Retail Institut	TÜV Süd	Trusted Shops	Ecommerce Europe	Norton	Fake	Netcomm	Federcomin
							
← GERMANY (DE) →							
		← ITALY (IT) →					
Q1: I have seen the trust mark before:							
13,6%	90,9%	85,4%	34,4%	60,2%	13,0%		
		17,5%	30,3%	83,6%	17,3%	7,7%	6,2%
Q2: Now please select the two trust marks that would increase the most your trust in the online retailer if you would see one of them on the online retailer's website. (Missing percentage = "non of the trust marks".)							
3%	36%	36%	12%	6%	3%		
		13%	30%	30%	16%	1%	3%

At an aggregate level, this corresponds to the higher prevalence in Germany. At the level of individual trust marks / seals, diffusion alone seems not able to provide an explanation for the differences. Three results stand out. First, the relatively high recognition rates of the Ecommerce Europe trust mark in both countries. In both countries, not one of the five preferred shops of the respondents had this mark. In Germany, not one the top 100 shops displayed the mark, and in Italy it can only be displayed together with the Netcomm trust mark, which got a 22.6% percent lower recognition rate – and not all shops with the Netcomm trust mark displayed the Ecommerce Europe mark (see section 4.3). Second, the very high recognition rate of TÜV SÜD trust mark compared to the low rate of the EHI trust mark, which has a higher diffusion especially under the top 100 shops. Third, the high recognition rate of the Trusted Shops trust mark in Germany seems also too high to explain it exclusively with the high diffusion (see again EHI rates under the top 100 shops).

The authors believe that in the case of the Ecommerce Europe and the TÜV SÜD trust marks spillover effects from similar labels / brands are responsible for the high recognition rates (Homburg 2020). The TÜV brand is one of the best-known brands in Germany because of its numerous certifications and testing activities; also outside of e-commerce. The octagon logo forms the basis of a wide range of TÜV SÜD certification marks, which look all very similar and are nearly omnipresent in Germany (Rüdiger 2008; TÜV SÜD 2021).

The Ecommerce Europe trust mark uses typical “EU” design elements, which many other labels are using as well. See for example the EU ecolabel (www.ecolabel.eu).

The Trusted Shops trust mark probably generated high recognition values not only because of its high diffusion, but also because of its additional services. Each customer who buys in a certified shop gets at least two E-mails from Trusted Shops, one related to the money back guarantee, and later a second related to the dealer evaluation. Both E-mails attract attention.

The fake seal received relatively high recognition rates in both countries. It shows how vulnerable consumers are to counterfeits. Other studies showed similar results (Moore 2005; Rodriguez, Rüdiger 2013). Finally, the Norton SSL seal received high levels of recognition in both countries, especially in Italy. The seal has a very wide distribution all over Europe; under the top shops, Ebay is using it. But the Norton seal is not a trust mark.

5.2 Perception of the trust mark schemes

The findings concerning the perception of internet trust marks are shown in table 3 on the next page. The correct statements, which the respondents full knowing the trust mark scheme should have ticked, are highlighted in grey. The results paint a consistent picture that leaves nearly no room for interpretation and is in line with other study results: a significant proportion of the online shoppers do not know what internet trust mark schemes stand for (Moore 2005; Rüdiger 2008; Rodriguez, Rüdiger 2013). This applies to all examined trust marks and the Norton SSL seal. Of particular concern is that many respondents believe that the offered products/services are also being certified (see table 3, “true” answers of item 4, Legal requ.). There are no significant differences between the countries, as evidenced by the correlation coefficients. The results were to be expected as 60.5% of the Germans and 56.9% of the Italians do not check if a visited website has a trust mark, and 93.7% of the German and 96.3% of the Italian respondents stated, that they never had visited a website of a trust mark provider to get informed about the trust mark scheme. So, a greater online shopping experience, a higher diffusion of internet trust marks, and the fact that seals of approval are a very common tool in Germany, has no impact on perception compared to Italy.

Besides this, two results should be highlighted: (1) Many trust mark schemes are incompletely documented on the websites of the trust mark providers. (2) In several studies, identified by the authors, trust marks, SSL seals, and other certification services, which sometimes not even include a mark / seal for the website, were not clearly distinguished or unconsciously confused (For example, Jiménez, Dittmar, and Vargas Protillo (2021) list in their article on page 9 three trust mark schemes for Italy. The authors of this paper could only identify one trust mark scheme among the three certification service providers listed.). This has influence on the validity of the findings, and shows how difficult it must be for consumers to find their way through the jungle of trust marks.

6 CONCLUSION

The analysis shows, that diffusion and awareness of trust marks depends on the country. Based on the theory of Fukuyama, we assume that high trust countries like Germany tend to show higher levels of diffusion and awareness as low trust countries like Italy. The problem of misperception of trust marks on the other hand is an enduring one and, as shown here, it is a cross-national phenomenon. This means that higher diffusion and awareness does not lead to a better understanding of the trust mark scheme. This is a serious issue, since it can lead to wrong, harmful consumer decisions (Laric, Sarel 1981). Even for research, the results concerning misperception have strong implications. Many scientific publications on trust marks are based on the assumption that respondents know what a trust mark stands for and that the trust transfer process follows the trust theory as described here. Since this is not the case, these research results are called into question.

In summary, the current situation could be described as follows. **Consumers** concentrate their shopping on very few well-known shops. The vast majority of these top shops do not display any trust mark. A minority of the customers may be aware that there is a trust mark on a website, but they don't know what it stands for and cannot differentiate it from other seals or labels. Even if consumers wanted to get informed about a trust mark scheme, they would notice that they are often poorly documented and of great variance.

Table 3. Perception of the trust marks

	Trusted Shops (DE: N=245, IT: N=50)						Ecommerce Europe (DE: N=74, IT: N=108)						
	True		False		Not sure		True		False		Not sure		
	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	
Data protection	63,7	66,0	6,5	2,0	29,8	32,0	73,0	65,7	5,4	9,3	21,6	25,0	
Data security	56,7	64,0	9,8	8,0	33,5	28,0	60,8	73,1	8,1	3,7	31,1	23,1	
Payment	60,7	46,0	7,9	10,0	31,4	44,0	51,4	39,3	8,1	9,3	40,5	51,4	
Legal requ.	66,4	72,0	11,9	4,0	21,7	24,0	68,9	72,2	4,1	1,9	27,0	25,9	
ADR	19,3	28,0	25,8	10,0	54,9	62,0	14,9	32,4	28,4	5,6	56,8	62,0	
Website cont.	79,6	66,0	4,1	6,0	16,3	28,0	71,6	67,6	5,4	0,9	23,0	31,5	
Liability	16,7	26,5	47,8	20,4	35,5	53,1	23,0	31,5	35,1	14,8	41,9	53,7	
Correlation DE - IT: 0.89	Average Not sure: 31.9					33.9	Correlation: 0,91				Average: 34.6		39.0
	Norton (DE: N=48, IT: N=115)						Fake (DE: N=19, IT: N=57)						
	True		False		Not sure		True		False		Not sure		
	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	DE	IT	
Data protection	68,8	67,8	12,5	7,8	18,8	24,3	68,4	68,4	5,3	3,5	26,3	28,1	
Data security	77,1	82,5	8,3	2,6	14,6	14,9	52,6	58,9	15,8	7,1	31,6	33,9	
Payment	77,1	37,4	2,1	8,7	20,8	53,9	52,6	44,6	0,0	8,9	47,4	46,4	
Legal requ.	31,3	50,4	31,3	8,7	37,5	40,9	66,7	67,9	0,0	1,8	33,3	30,4	
ADR	10,4	21,7	39,6	13,9	50,0	64,3	26,3	23,2	21,1	5,4	52,6	71,4	
Website cont.	66,0	67,0	12,8	7,0	21,3	26,1	73,7	73,2	5,3	3,6	21,1	23,2	
Liability	10,4	34,8	47,9	14,8	41,7	50,4	26,3	39,3	31,6	10,7	42,1	50,0	
Correlation DE - IT: 0.71	Average Not sure: 29.2					39.3	Correlation: 0.94				Average: 36.3		40.5
TÜV (DE: N=253)													
	True	False	Not sure			True	False	Not sure					
Data protection	77,0	4,0	19,0	ADR		22,2	28,6	49,2					
Data security	64,7	6,3	29,0	Website cont.		79,8	3,2	17,0					
Payment	62,4	7,2	30,4	Liability		17,0	40,7	42,3					
Legal requ.	73,6	5,6	20,8	Average Not sure: 34.8									

Values in italics do not exceed the critical χ^2 value at the 1 % confidence level (deviation from an even distribution)

Trust mark providers are mainly trade associations or private companies. Especially the latter need sustainable financing and achieving profits (Balboni, Dragan 2018; European Commission 2012; Löbbers et al. 2020). The more consumer-friendly the scheme (i.e. comprehensive award criteria in combination with strong compliance and enforcement mechanisms), the more costs it causes and the higher the price for certification will be. Online retailers' willingness to pay seemed to be not high enough for a consumer-friendly, comprehensive trust mark schemes (Löbbers et al. 2020). Consequently, trust mark providers, who entered the market with a comprehensive scheme according to the recommendations of trust mark studies (see e. g. the excellent study from de Bruin et al. 2005), have to leave the market again, downgrade their trust mark scheme to reduce costs and/or find other sources of income. That is exactly what can be observed in the market: (1) Many trust mark schemes have disappeared. Most recently, TÜV SÜD has discontinued its service. They offered a comprehensive (e.g. covering IT security criteria and on-site inspections) and a consequently very expensive trust mark scheme. (2) Trusted Shops has removed IT security from its award

criteria (Trusted Shops 2007; Trusted Shops Germany 2021). (3) Trust mark providers started to offer additional services. These are further trust services for online shoppers like customer ratings and reviews (see section 4.3), but also additional services for online shops, which have nothing to do with services of a trust intermediary. These services are comprised of any kind of legal advice, e.g. to avoid costly written warnings, and marketing measures, e.g. to create conversion and customer retention (Trusted Shops Germany 2001; Händlerbund 2021; see also section 4.3).

In the end, one question remains: What is the lesson learned? From the point of view of the authors, the idea that a pure trust mark service works as trust intermediary in an unregulated market was based on misguided assumptions of consumer behaviour and of other market players, e.g. the emergence of very many different schemes run by trade associations. Nearly all studies and analysis conducted forgot to integrate a comprehensive consumer perspective; especially they ignored the problem of misperception, although studies suggest that this is a fundamental problem with any kind of trust marks (Beltramini, Stafford 1993; Laric. Sarel 1981; Moores 2005; Parkinson 1975). What is needed is a new mindset, an outside-in approach, putting consumer needs (and its behaviour) in the centre. For sure, consumers want privacy, IT security, fulfilment, and may be even some kind of trust mark, but they also want convenience, simplicity, and no cognitive overload. Additionally, there is one important constraint to be considered here. The aims of trust mark providers are not identical or fully complementary with the aims of consumers (Balboni, Dragan 2018; Löbbers et al. 2020). This makes the search for a solution more complicated and creates challenges for research and policy. For researchers may be the theory of two-sided markets will offer additional insights. Politicians may reconsider the option of a fully-fledged European trust mark (European Commission 2012).

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