

Expert Group

E-Commerce Login & Identity

Account and Login Issues: A Blind Spot?

Takeaways

1. Having many different accounts and passwords to juggle is a source of real inconvenience for consumers.
2. While retailers see this reflected in conversion loss, they have yet to start proactively exploring solutions to this issue.
3. Retailers see the benefits of offering consumers a single, central login ID, provided that Thuiswinkel.org is involved in this initiative and security can be guaranteed.



Easy shopping on multiple websites using a single solution...the dream of every consumer and retailer?

It's starting to look like a relic of times long past: being required to create an account with an online store or service before you can make a purchase. Multiple studies have shown that the use of accounts that are linked to social media logins or based on solely a username-and-password combo is not only insecure, but also forms a source of irritation on the part of consumers, resulting in conversion loss. There are various login solutions available that can potentially reduce customer annoyance and increase conversion rates. However, this market is new, fragmented, and rapidly evolving. Is the perfect solution already available, and to what extent has this issue been a blind spot for the e-commerce industry? In this blue paper, we share insights and explore opportunities for the industry.

1. The Account Problem

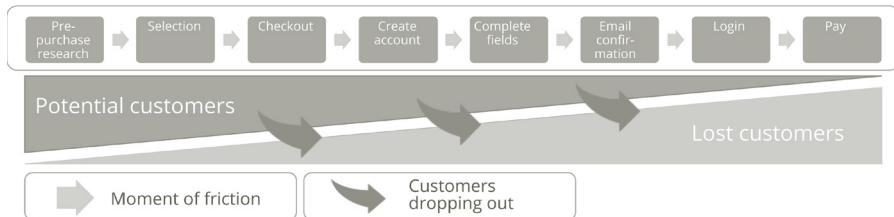
Why do online retailers want consumers to create an account? What details are consumers required to provide when creating these accounts, and how can retailers obtain these details without inconveniencing the customer? Consumers want a fast, easy, and hassle-free shopping experience. With that in mind, having to create an account does not seem to jibe with the e-commerce focus on ensuring an enjoyable customer journey. If we look at the market of login solutions, there appears to be a "chicken-or-egg" problem. A variety of companies are offering a host of different solutions to what our expert group has come to describe as the "account problem."

The "account problem" is how we refer to the current situation, in which online retailers and service providers require consumers/users to create an account in order to gain access to their services. In most cases, this account can be only be accessed using the combination of email address and password. Consumers tend to use the same email-password combination for each of the many accounts they are forced to create, which constitutes a major security risk. This problem is compounded by the fact that the relevant regulations, including the General Data Protection Regulation (GDPR), increasingly require personal data to be adequately protected and used only for lawful purposes.

This expert group has asked itself the question of whether the account problem is a perceived or actual problem afflicting the e-commerce sector, and if the latter, what opportunities there might be to change the situation. We came to the conclusion that there is, in fact, a problem, that there are improvements to be made, and that Thuiswinkel.org has a role to play in developing the solution.

1.1 Annoyance During the Customer Journey

When we look at accounts and logins as part of the customer journey in the context of e-commerce, we see that having to create a new account with each online retailer is perceived as a major hassle by consumers. There are various different stages and moments at which consumers decide to abandon the shopping process. The image below visualizes a basic flow and reveals where the conversion loss occurs.



At what stage of the customer journey does conversion loss occur?

1.2 Significant Percentage of Lost Customers

Depending on the industry in which the retailer operates, the percentage of abandoned shopping carts can run as high as 80%,¹ while the percentage of shoppers who leave the website due to having to create an account can be even higher – up to a staggering 37%.²

The section of the 2018 GfK Consumer Survey conducted on behalf of this expert group shows similar results, with 69% of respondents, for example, stating that they regard creating an account as a source of irritation. Additionally, 27% of respondents stated that they did not complete checkout because they forgot their password or were required to create an account.

1.3 Multiple Accounts and Frequently Forgotten Passwords

In their TV special Kassa XL, Dutch consumer portal Kassa estimated that the average user has more than 25 online accounts.³ The survey we conducted through the abbi research chatbot shows similar results among the ShoppingTomorrow experts: 84% indicate that they currently use more than 15 online accounts, while 81% report losing a password at least once a month. Other studies show that one email address can be associated with as many as 130 accounts and that the average registration page requires users to complete 15 input fields.⁴ Given all of this, it's only natural that consumers are often unable to see the forest for the trees and experience irritation during the customer journey.

"I see that many people will inadvertently enter an incorrect email address when creating an account or placing an order. They only find out when they contact us to see why they haven't received any of our emails. In other words: this involves a lot of hassle for customers."

Ruben Arends, e-commerce expert at Amac

1 WWW.BAYMARD.COM/LISTS/CART-ABANDONMENT-RATE

2 WWW.PAYMENTSSOURCE.COM/OPINION/COMPLEX-USER-EXPERIENCE-BOOSTS-CART-ABANDONMENT

3 WWW.TELEGRAAF.NL/NIEUWS/2109124/GEMIDDELDE-NEDERLANDER-HEEFT-25-ONLINE-ACCOUNTS (INFORMATION IN DUTCH)

4 WWW.DIGITALGUARDIAN.COM/BLOG/UNCOVERING-PASSWORD-HABITS-ARE-USERS-PASSWORD-SECURITY-HABITS-IMPROVING-INFO-GRAPHIC

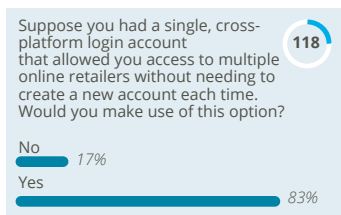
As a result, the average consumer is inclined to resort to an approach that makes it easier for them to remember their passwords: using the same combination of email address and password for each new account. It should be evident that this approach is highly insecure. *Account takeover* problems are one of the main causes of fraud in the e-commerce supply chain. The dark web, for instance, is filled with hacked login details.⁵

1.4 Why Do We Use Accounts in the First Place?

There is a logical explanation for the use of online accounts: it is reassuring for both service providers and users to know who they are doing business with and be able to trust that they can securely exchange data. The account constitutes a direct communication channel between two parties.

Pros of Online Stores	Pros for Consumers
<ul style="list-style-type: none"> • Data • Relationship/personalization • Order status/order history • Self-service when dealing with issues or updating personal data • Economic value of customer relationship/lock-in • Profiling 	<ul style="list-style-type: none"> • Repeat purchases • Access to order history • Convenience due to stored data • Option of personalization and tailor-made services • Being able to create a wish list • Seeing your favorite products at a glance • Returns management • Receipts and warranty

2. Why Do We Need a Change?



Our expert group firmly believes the account problem is real, and needs to be addressed. The studies show that significant conversion loss occurs with online stores that require consumers to create an account before making a purchase, simply because having to fill out forms is regarded as a hassle. The fact that the current situation is ripe for improvement is demonstrated in part by the popularity of social media logins and password managers, and the flourishing

market of technical solutions.

2.1 Irritation and Security Risks

From what we have gathered, consumers also feel it's time for a change. We used abbi insights to ask the ShoppingTomorrow experts whether they would use a solution that allows you to shop at multiple online retailers without the need to log in each time. An impressive 83% of respondents responded in the affirmative. When we put the same question to a larger group of consumers in the 2018 GfK Consumer Survey, 66% of respondents said they would find it convenient to be able to use a single account to make purchases from multiple retailers.

Another relevant study is the one conducted by Currence – the organization that coordinates the payment systems in the Netherlands – to gauge market demand for online identification using the iDIN service. 79% of respondents stated that they would like to see a single, secure login solution for multiple accounts.⁶

5 WWW.FORBES.COM/SITES/LEEMATHEWS/2017/12/11/BILLION-HACKED-PASSWORDS-DARK-WEB/

6 WWW.IDIN.NL/ACTUEEL/MILJOEN-IDENTIFICATIES-IDIN

It is also evident that the current approach to account security constitutes a security risk. According to the Currence study, 42% of consumers use insecure passwords, while 56% of young people do this twice as often as adults. It is no wonder, then, that losses caused by online fraud run into the millions.

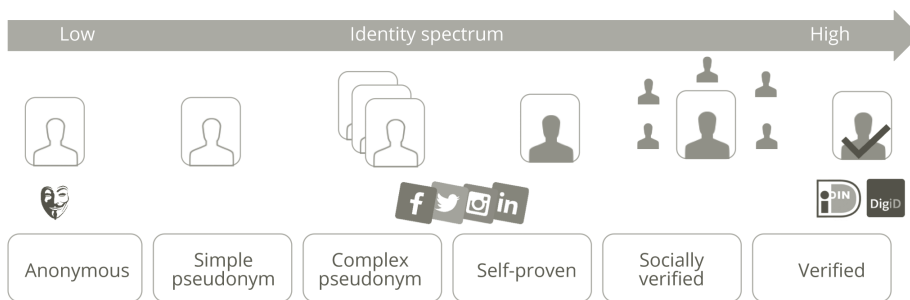
2.2 Security Is Key

In other words, everyone involved stands to gain from making the current process easier, but of course it needs to be more secure as well. Every solution ultimately needs to be – and this is essential – both secure and future-proof. Although reducing hassle for users while at the same time increasing security might like seem a conflicting set of goals, the current practice of managing more than 20 accounts while using weak passwords is so inefficient and fraught with problems that even the introduction of two-factor authentication (2FA) constitutes an improvement. In addition to being more secure than passwords, 2FA involving either a *one-time password* (a generated access code sent by text message) or a QR code that the consumer needs to scan can be set up in a straightforward and relatively user-friendly way. Smartphones have become an essential part of the customer journey and are therefore a logical part of the 2FA solution. User-friendliness and security can, and must, go hand in hand.

Every external login solution is trying to crack the challenge of offering a *master key* for multiple locks. There are parties with malicious intentions that are trying to get their hands on consumers' login details for online stores, which they can then use to place fraudulent orders. That's why any master key needs to be highly secure. Companies specializing in securing accounts, systems, and access tend to be better equipped than online stores to engage in this "arms race."

3. Identity and Logging In

Creating an account basically involves sharing personal details that are required to successfully complete online transactions, e.g., name, address, and age. This information forms part of the consumer's identity. Our expert group decided that we can simplify the concept of identity by using a spectrum and keeping the number of attributes limited to those that are directly relevant to e-commerce.



Level of verification on the identity spectrum

As shown in the image above, the verification spectrum runs from completely anonymous to verified. "Pseudonym" in this study refers to a pseudonymous identity created by, for example, entering a handle or making an avatar that cannot be traced back to you. If you use this *alias* in multiple places, we use the term "multiple pseudonym." Creating an account on a social-media platform such as Facebook goes one

step further. In this case, users enter information that makes them identifiable to their social network. This means they are sharing their real name, age, and address, voluntarily and often fully consciously. However, since this data is not verified, it cannot be considered reliable. We require validated data for this purpose, i.e. information verified by reliable third parties.

3.1 Why Identity Is Relevant

Purchasing a book in a bookstore is something that can be done almost completely anonymously. You walk into the store, grab the book you want, and pay for it at the counter in cash. Since this sales transaction involves no exchange of data, your identity is completely unknown. Online, on the other hand, even the most basic sales transactions require the exchange of personal data. For one thing, since your order will need to be shipped somewhere, a delivery address is required. And even if you choose to pick up your order, a check will still need to be carried out to verify that the person picking up the package is the rightful owner.

In other words: the exchange of personal data is unavoidable in online transactions. As the quality and diversity of online services have increased, the amount of data we exchange has grown in tandem. It has become virtually impossible to purchase insurance offline, for example, and the nature of this product requires verified identification. The exchange of data that allows you to demonstrate you are who say you are has become common currency.

3.2 The Minimum Set of Data Required for Online Shopping

When we're talking about data, we can create an endless list of personal information, or attributes, depending on the type of services involved. Not all of those attributes will be relevant to a central e-commerce solution. Retailers don't need to know your social security number, for example, and your shoe size will be relevant to some online outlets, but not all of them. Our expert group has compiled a list of the most relevant data that consumers need to provide in order to purchase a product online, divided into two categories: the "must-haves" (i.e. the essential information) and the "nice-to-haves" (i.e. information that is not indispensable, but nonetheless useful). However, the big question remains: How do you validate this information?

Must-have data	Nice-to-have data
<ul style="list-style-type: none">• Shipping address• Pseudonym/nickname• Email address or phone number	<ul style="list-style-type: none">• Name and address details• Age• Gender• Email address and phone number• Account number

4. A Fragmented Market of Identity Solutions

We are not the first to think about ways to address the account problem. The issues relating to identity solutions are not new, and the number of solutions available in the market is rapidly increasing. But while there is no shortage of technical solutions, there are no clear market leaders or standards. Why is that? The key factor is arguably the consumer – ultimately, they are the ones who decide whether new technologies are adopted, although businesses can have a significant impact on what consumers believe they want of their own accord.

We are still learning. Online services have replaced the majority of offline services over roughly the past two decades, or have come to represent fully viable alternatives to their offline counterparts. We can order a passport from a government service online and no longer purchase insurance from traveling sales reps like we did in the past. E-commerce volumes increase by double digits every year, and we have developed an effective way of conducting online business. However, gradually situations are starting to arise where the established way of doing things no longer suffices. Consumers end up losing track of what data they have shared where, which results in irritation and hassle on their part. We are also seeing an increase in the number of cases of phishing, identity fraud, and abuse.

4.1 Types of Solutions and Their Pros and Cons

People's approach to sharing personal data is undergoing major changes. When we talk about sharing personal data, we inevitably get bogged down in the whole privacy debate. We place more and more trust in the internet, but paradoxically we are also becoming increasingly aware of the implications of this blind trust. The purpose for which the various solutions to the account problem have been designed varies. Whereas some products are high-quality online identification tools based on verified data, password managers are only trying to make it easier for people to access different websites. Other solutions, meanwhile, enable consumers to check what they are sharing with whom, approaching the account problem more from a privacy perspective than from a convenience point of view.

Since this study is concerned with the combination of logging in and obtaining personal data, we are dealing with a wide spectrum. We are mainly focusing on solutions in the B2C and C2C domains. We have compiled an overview of the available login and identification solutions, which can be seen below. We assessed these solutions in light of the account problem; the pros and cons of each solution are presented in the overview. These pros and cons sometimes apply to both retailers and consumers.

	Attribute	Pros	Cons
Account website/ My environment	This is an account you create yourself with an online service provider.	<ul style="list-style-type: none"> • Convenience • Relationship between service provider and consumer • Data is managed in-house • Personalization • The user has a degree of control • Data requirements can be adjusted • Making repeat purchases is easy • Data only needs to be entered once • Ability to check order status 	<ul style="list-style-type: none"> • Limited to a single website • Annoyance while creating the account • Hidden charges • Vulnerable to phishing/fraud • Users often forget their password • Consumers are reluctant to leave their details with every retailer • Large number of separate logins • Entering a password costs time

Social media login	This login method involves using the login feature of a social-media platform.	<ul style="list-style-type: none"> • Convenience • Single password/login • User-friendly • Fast access • Details are easy to remember • No new account required 	<ul style="list-style-type: none"> • Limited options • Expensive • Sharing data with third parties • Incorrect/incomplete/fake details • Privacy reputation • No control over what data is shared
Password manager	This solution remembers your passwords and user-names.	<ul style="list-style-type: none"> • Users can log in anywhere, anytime • More secure passwords, resulting in less fraud • Convenience • Works on a variety of devices 	<ul style="list-style-type: none"> • Can we trust them? • Still requires a password • Redirect required • Doesn't always work without a hitch • Users still need to create accounts with the retailers they want to shop with • Does not always work between different devices
Personal Data Store	This solution manages verified and unverified data on your behalf, which you can share through the service.	<ul style="list-style-type: none"> • No lock-in • User gains control over their own personal data • Versatile and extensive 	<ul style="list-style-type: none"> • Customers need a cell-phone • Additional actions required • Reach and availability
Third-party solution	These types of solutions make it possible to log on to the services of affiliated retailers.	<ul style="list-style-type: none"> • Market-specific solution • Suitable for e-commerce • Central data location • One-time creation • Convenience 	<ul style="list-style-type: none"> • Limited reach • Continuity • Only one additional key • Still limited in terms of applications • Consumers have greater trust in the solution provider
Verified third-party solution	These are solutions that guarantee the accuracy of the information entered.	<ul style="list-style-type: none"> • Security • Convenience of single sign-on method • High level of reliability • Familiar • Fast – users quickly get used to this solution • Mobile app is available in some cases • Verified data 	<ul style="list-style-type: none"> • Unknown • You cannot create an account online independently • Expensive, as you pay per login • Two iDEAL transactions (i.e. payment and identification) for every transaction

4.2 Where Is the Winning Tool?

One of the main causes of the current fragmented situation is the "we-have-always-done-it-this-way" phenomenon. When something is working okay as is, or has always been done a certain way, it is hard to break the habit. Online retailers seek to build relationships with their customers, and having them create an account is one way of accomplishing this. While there are some exceptions, on the whole building relationships with customers by making them create an account with your online store was an excellent way to create customer loyalty in the past – "was" being the operative word. Online retailers that currently have large customer bases are able to reap the fruits of these relationships if they are

also able to provide their customers with permanent added value in other ways. Yet for customers looking to simply shop for products without establishing any sort of lasting relationship with the seller, the account requirement has actually become an obstacle. It is these customers who successfully enter into a quick, one-off relationship with the retailer using guest accounts, social media logins or specific market solutions.

Another reason for the current state of play is the "chicken-or-egg" conundrum. Since it is expensive for online retailers to integrate every new solution that is launched into the market, it makes sense to wait for the market to mature first and for these products to prove themselves. The same is true for consumers. Why would you start using a master login solution if there are only a handful of websites that accept it?

5. Call to Action

The expert group believes that Thuiswinkel.org has a role to play in changing this situation. When we look at the market of identity solutions, we see a fragmented market in which a wide range of solutions are vying for large-scale adoption. The expert group believes the available solutions meet a clear need. Making the e-commerce landscape more user-friendly results in higher revenues, while increasing security reduces expenses related to fraud. The vast majority of online retailers stand to benefit from successful, commonly accepted login solutions. Of course, the concrete implications will differ for each service provider depending on their size, business, and target demographic.

So why is large-scale adoption important? It is primarily about the expenses and effort involved in integrating different solutions into systems. Large-scale adoption does not mean that we will eventually be working with just one solution. However, a market with a number of major players using a standardized method would be preferable to the current scenario, and given the way similar markets have evolved this is not an unrealistic idea.

5.1 Thuiswinkel.org: A Familiar and Trusted Brand

Finding a way out of the chicken-or-egg conundrum is a role Thuiswinkel.org could potentially take on. The recent brand awareness survey conducted by Thuiswinkel.org reveals that 94% of online shoppers are familiar with the Thuiswinkel Guarantee quality label. In addition, two-thirds of consumers pay attention to quality labels while shopping online, while 24% of consumers shop exclusively at online stores with the Thuiswinkel Guarantee quality label. Thuiswinkel.org also has a membership base of more than 2,200, collectively accounting for roughly 75% of Dutch e-commerce revenues. As soon as Thuiswinkel.org launches a solution in the market, this product will clearly be ahead of the pack in terms of brand awareness and availability.





The Dutch e-commerce market could take a proactive approach and take charge of a trend that is bound to affect our market at some stage no matter what. The GDPR requires that we rethink our approach to personal data, and as online retailers' revenues increase, so does the risk of misuse and fraud. By working together as an industry and establishing where our shared interests lie, we can deliver added value. An additional advantage is that this will give both consumers and online retailers access to a resource that allows them to organize their data in a secure and simple way. By seizing control ourselves, we can decide what issues we want to see addressed, and on what terms.

Given our shared interests, our industry should get proactively involved in addressing this issue, rather than sitting back as the cards are dealt. That's why it's important that it be established in the near future what role Thuiswinkel.org is going to play. Will this role be limited to informing its members about new trends and developments, or will it be more actively involved, for example by promoting the adoption or the collective purchase of existing solutions? Other possibilities would be for Thuiswinkel.org and its members to choose a particular solution together or work together to design a customized e-commerce solution.

6. Conclusion

The e-commerce market is faced with an "account problem." Consumers are experiencing the problem of forgotten passwords and a plethora of accounts to be managed. Retailers, for their part, acknowledge the problem of forgotten passwords and abandoned shopping carts. Studies have shown that consumers are open to the idea of using solutions that allow them to reduce the number of passwords and give them more freedom during the shopping experience, as well as simplifying this experience. Consumers are eager to have the option of using a single, central login, without having to fill out endless forms. Retailers also see the benefits of offering consumers a single, central login, provided that Thuiswinkel.org gets involved in this effort and security can be guaranteed. Additional research into the exact approach to be taken must be conducted in the next stage. In any case, the participating experts have stated that they are open to the idea of pilot projects.

The image shows a user interface for account creation and connection options. On the left, there are four buttons for connecting with different services: TW.org, Twitter, Google+, and Email. On the right, there is a form titled "CREATE NEW ACCOUNT:" with fields for NAME, EMAIL, and PASSWORD, and a "CREATE ACCOUNT" button. The word "OR" is placed between the two sections.

 CONNECT WITH TW.org	OR	CREATE NEW ACCOUNT:	
 CONNECT WITH TWITTER		NAME	<input type="text"/>
 CONNECT WITH GOOGLE		EMAIL	<input type="text"/>
 CONNECT WITH EMAIL		PASSWORD	<input type="password"/>
		<input type="button" value="CREATE ACCOUNT"/>	

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