Digital Identity:

Online customer onboarding is all about personalisation

Shopping Tomorrow 2017
Expert group ‘Digital Identity’

INNOPAY

Expert group ‘Digital Identity’

Shopping Tomorrow is a digital commerce platform for all e-commerce professionals. The aim is to collaboratively investigate and add to the transformation of retail. Future developments are investigated through expert groups. This paper presents the results of the 2017 expert group ‘Digital Identity’.

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Online customer onboarding is all about personalisation

Managing varying digital customer identities

Nowadays, businesses are quickly digitising and customers do more and more online. New ecosystems arise in which customers share large amounts of their personal details, from their household address to shopping behaviour, at the shop, chat and purchase online. The amount of personal data shared depends largely on three aspects; the context, how comfortable one feels online, and how much value customers attribute to their personal data. Sharing this personal information does not necessarily mean that customers have a clear understanding of what happens to it and how it is being used. A privacy paradox is the result.

These developments in digitalisation and customer privacy, especially around the onboarding process, have led to a need to better understand how online customer identification will develop in the coming years and how this potentially affects retailers and service providers.

Privacy-paradox:
Customers are concerned about their online privacy, but this is not reflected by their online behaviour, where they choose convenience over privacy.

Research developments

The expert group Digital Identity started with the following research question: "How do I implement a fully digital process for customer onboarding and product delivery for existing and new B2B- and B2C-customers?"

The online 'onboarding' of a customer is about creating a (temporary) digital identity of the customer. This identity is subsequently filled with attributes (data elements) needed to deliver a certain product or certain service.

Almost immediately, the expert group concluded that:

- With current technology a fully digital process for customer onboarding is possible. Leading examples are already present in the market, like some of our expert members have demonstrated: CM, InShared and Videoland;
- Optimisation of current digital processes for customer registration and identification, appear to be a bigger challenge for many organisations ;
- The creation of a digital identification standard for B2B and B2C proves to be very complex as organisations interpret and define personal information in different ways and customers not only provide their data across several channels, they often give different answers for the same question (attribute).

One of the major problems related to a digital onboarding process is the difference between customer behaviour and organisations' desire for data. Organisations are challenged in their approach to customers in order to improve conversion rates and create optimal demand for their products or services. This paper aims to advice retailers and service providers on how to best approach and onboard their customers online by exploring key trends, digital identity, online customer behaviour and current onboarding processes.

1. Digital identity is always context-dependent

If organisations want to build a relevant customer relationship and optimise conversion, a thorough understanding of digital identity and online customer behaviour in relation to a specific context is key. First, we need to clearly identify the data elements that make up a digital identity.

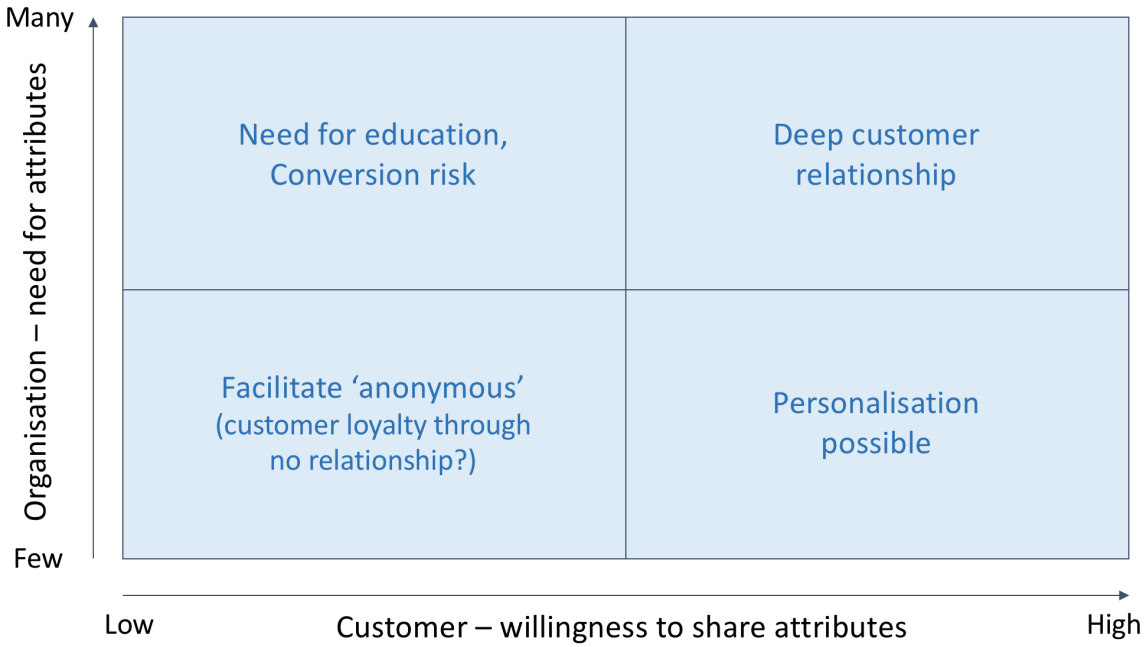
> A digital identity is an online representation of an identity (human, organisation, machine) consisting of attributes (data elements) that describe the identity.

The data elements, or attributes, that are needed to determine the identity of the customer can differ per market segment, organisation, product/service and customer. For instance, acquiring and interpreting the attribute 'address' differs per context, organisation and customer; does it cover e-mail-, residential-, postal-, or delivery address? The same goes for 'name'; does it entail initials, baptismal name, nickname or an alias? At first sight, the attribute 'name' shows overlap in definition, which in essence offers opportunity to agree to one digital identity or definition in multiple contexts. However, organisations also interpret attributes quite differently. Driven by regulation, their own risk-approach, quality of service levels and commercial goals, every context does require a unique digital identity from and organisational perspective.

> With the introduction of the General Data Protection Regulation (GDPR), organisations are faced with stricter rules in gathering, processing and storing personal data of their customers. Customers get more control in managing their personal data and retailers and service provider are limited to using their personal data for the explicit purpose only (data minimisation).

The digital identity of customers is also unique for every context and is defined by their online behaviour and willingness to share attributes. Their willingness to share is primarily influenced by the type of product, their trust in the retailer or service provider (brand) and the value they assign to the requested set of attributes. For every context, the customer decides again what, how and with whom data is shared. This leads to inconsistent data in the customers digital identity.

The expert group has developed a model (see next page) that will help organisations to better understand the context they operate in and how their own context correlates to the willingness of the customer to share personal attributes. The model provides tooling on how to best design and optimise onboarding processes and improve conversions rates. In this paper the model will be explained in more detail using three use cases.



2. The online customer behaviour is schizophrenic

2.1 Data sharing is often contextual

The information a customer shares online varies greatly. Depending on the context, the customer chooses to anonymously order a product, share only specific attributes or a complete personal profile. Their willingness to share personal attributes (horizontal axis of model) mainly depends on:

- Type of product or service the customer intends to buy;
- Trust of customer in organisation and brand;
- Value assigned by the customer to own attributes.

Type of product

Depending on the type of product, customers interpret what attributes are reasonable for an organisation to request and behave accordingly. This behaviour has been tested and analysed with a group of approximately forty attendees during our presentation at the Shopping Today-congress 2017. Different types of products were used, where the public indicated how they would behave and what attributes they were willing to share. An interesting finding was that their willingness to share attributes significantly drops when online purchasing a book than when buying a more complex product (i.e. an insurance product).

> **"Customers value privacy over an optimal service offerings"**
> GfK survey by ShoppingTomorrow Customer research 2017
>
> Depending on the type of product or service, customers state that privacy prevails, however, they do not (yet) behave accordingly in protecting their identity when sharing data."

Trust in brand

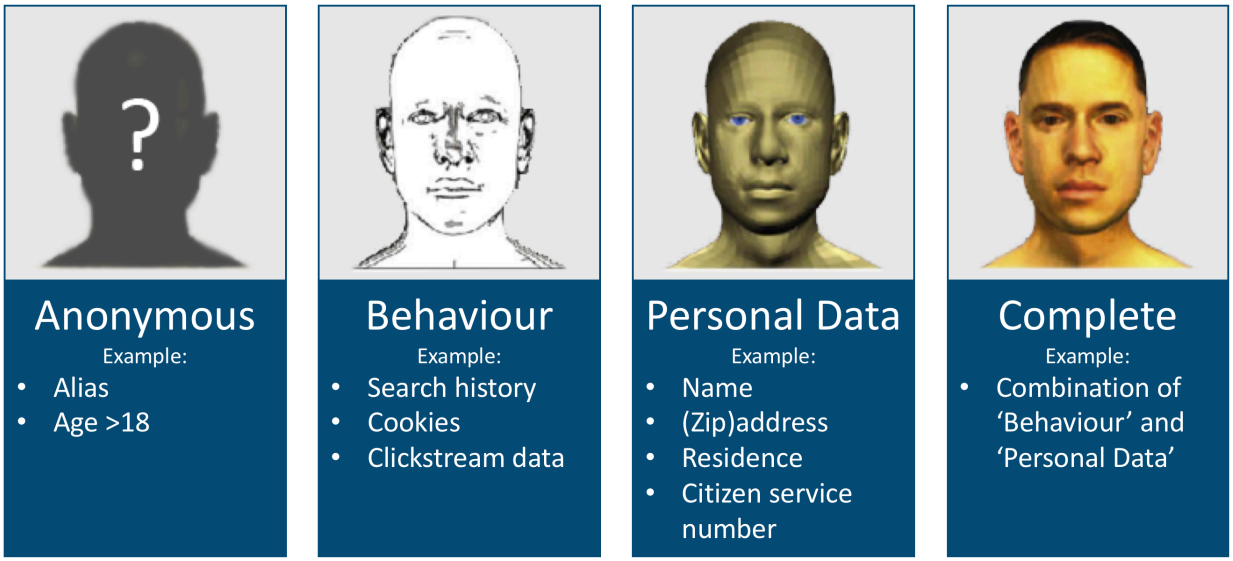
Trust in the brand affects the willingness to share personal information. Many studies (i.e. Edelman, Mobile Ecosystem Forum and Prophet) show that trust in a brand and willingness to share personal information positively correlate. A more striking finding is that customers show schizophrenic behaviour. On social platforms (i.e. Facebook, Twitter) users share a lot of personal information, while studies also show that those same users do not trust social platforms in how they manage their personal information. As a result, social platforms are now putting in a lot of effort to regain their users' trust by becoming more transparent on how information is handled.

Value of own attributes

Customers unconsciously assign a certain value to their attributes. This particularly applies to attributes that reveal the customer's behaviour. In our survey during the ShoppingToday 2017, it was confirmed that consumers highly value their behavioural attributes. As soon as organisations request "behaviour-related attributes", it is therefore essential to show the customer the added value of sharing these attributes. For example, when in relation to finalising a service contract with an utility provider, information is requested about family composition and the time spent at home, the customer needs to understand how this information will provide extra value (cost savings) in this context.

2.2 Customer behaviour profiles

In this paper, we have identified 4 categories of customer identities. These identities vary from a very limited or anonymous identity to a full customer profile. The extent to which the customer wants to load its identity with personal data mainly depends on the product or service and related regulatory requirements. The four identities are not mutually exclusive but provide a testable framework regarding the sharing of identity attributes.



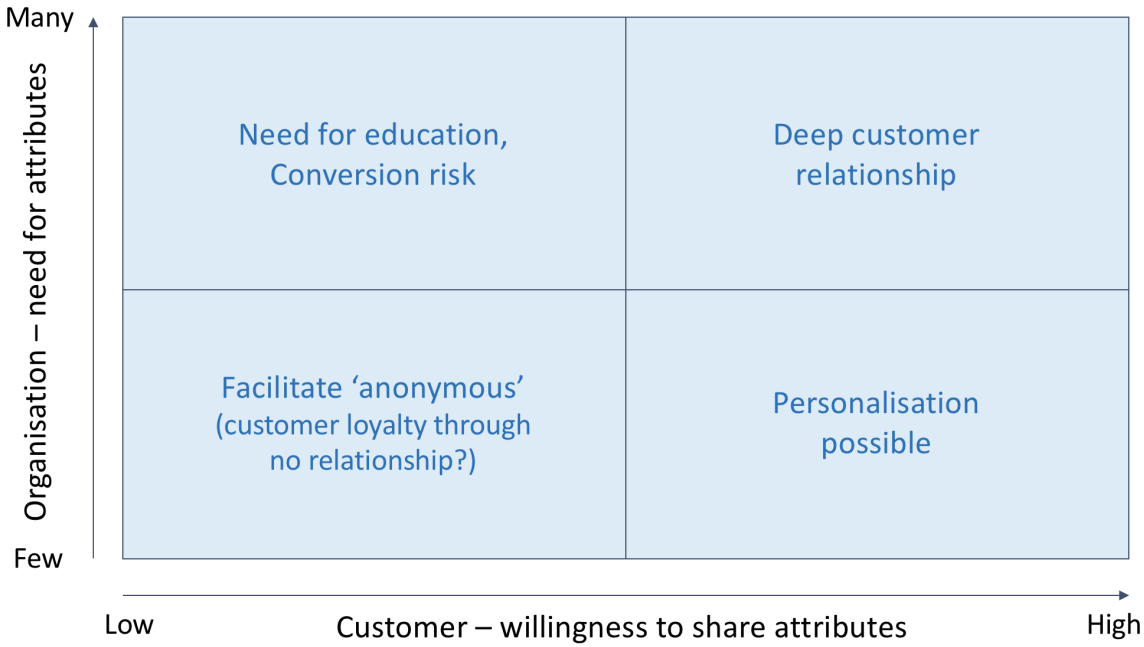
Profile	What?	How?	Typical use case?
Anonymous	• Users do not identify themselves or provide an alias when ordering a product or service • Only some digital data tracks arel eft like IP-address and device	• Using a 'minimal account' when purchasing a product • Creating an alias on a forum • Browse anonymously	• News and media • Ordering products 'as a guest' • Search- and comparison services
Behaviour	• Search history, cookies, browse- and device behaviour or explicitly asked to describe behaviour • Track behaviour while product or service is being used	• Based on search history, cookies, browse- and device behaviour • Respondent behaviour during onboarding processes or as part of online service provisioning • Perform additional tests when the product or service is in use	• All products and services
Personal data	• Personal data • Age, gender • Payments data • Email address, phone numbers	• Based on contact forms and explicit questions during onboarding	• Retailers and service providers • Social media and other online platforms
Complete	• Personal data and/or explicit authentication (i.e. national identifier and passport) • Search history, cookies, browse- and device behaviour	• Based on contact forms or explicit authentication (i.e. national identifier, eID, and passport) • Based on completed profiles and subsidiary data	• Often required by regulation and duty of care • (semi) Government • Financial services • Social media

2.3 Conclusion

Unknowingly, customers maintain different online profiles when purchasing products online. Customers are often not aware of the online behavioural profile that is created by organisations. Moreover, when customers are aware they have no influence or control over what kind of profile is created by these organisations.

Looking at the types of attributes the customer is able to share online, the identity of customers can be split into four categories. These identities vary from an almost anonymous identity to a complete customer profile.

Organisations face significant challenges to recognise these different customer identities. As such, insight is needed into the bare minimum of attributes that is required to offer a specific service or product. After all, the customer signals that privacy is valued over optimal service levels. Another challenge for organisations is to exlain to the customer what attributes offer what value.



The next chapter will elaborate on the vertical axis of the model. More back ground will be provided into the need for personal information from an organisational perspective and its relevancy to the onboarding context.

3. Onboarding use cases show a mismatch in requested attributes

3.1 Acquiring attributes in onboarding

It is important that retailers and service providers understand the context in which they operate, in order to establish an optimal onboarding process and online conversion. A better understanding will enable them to anticipate on changing customer behaviour and their varying identities. The expert group has tested the model introduced in the first paragraph, using three use cases.

Based on the current onboarding process, each use case demonstrates how organisations are requesting personal data or attributes during the customer journey. These attributes can be divided into three categories to show the necessity from an organisational point of view.

Attribute categories

When determining the customer's identity, organisations need attributes. These attributes can be divided into three main categories:

- **Legal**: attributes that enable the service provider to comply to regulation related to products and services offered (i.e. duty of care, KYC, Telecommunications Act, AMLD[1]);
- **Operational excellence**: attributes that are required to (optimally) provide a specific service level and manage internal risk policies (financial and reputational);
- **Commercial**: attributes that contribute to the commercial agenda of an organisation and particularly focus on building long term relationships with (potential) customers.

[1] AMLD (Anti-Money Laundering Directive) is a directive focussed on the prevention of the use of the financial system for the purpose of money laundering and terrorist financing.

In order to be able to compare the use cases, the activities related to onboarding and customer journey have been clustered into three core activities: orientation, selection and ordering. Lastly, the use cases often refer to 'Peter Privacy'. This is a fictive person that is (above average) aware of its privacy while onboarding.

Each use case shows to what extend the requested attributes or need for attributes (vertical axis) matches the willingness to share these attributes by the customer (horizontal axis). Each of the use cases provides a different level of complexity in terms of product and service offering.

3.2 Use case: Purchasing a book online

Product type	Brand	Customer value of attributes
• Plain commercial product • Low operational risk • Only a few attributes required for delivery	• Online retailers have relatively high brand value in relation to other industries • Consumer have trust data is used to create more value for the customer	• Customer highly values attributes as he/she feels that little information is needed for the service • Initially low willingness to share • Logical and desirable when web shops use attributes to improve the user experience or recommendations

Current customer journey of purchasing a book online

Orientation phase	Selection phase	Order phase
Peter Privacy visits a website of an online retailer. By continuing onto the website, he automatically gives permission to the cookie notification. He searches and clicks through the content.	Peter sees a nice book and decides to buy it. On the website of the online retailer the customer needs to provide personal details before the book is delivered.	Peter orders the book, the retailer asks for the payment. Lastly, Peter is asked to agree on the digital arbitrage terms of conditions and general selling terms of conditions before the order is accepted.

Overview of relevant attributes from the retailer's perspective

Legal	Operational	Commercial
Registration date Opt-in cookies Acceptance terms of service Age (in case of age restriction on product)	Transaction amount, IBAN Country, ZIP code, house number (depending on the choice of delivery or paying afterwards Payments method preference: required for the payment procedure Delivery location Email address / password Phone number	Matching IP-address in existing CRM – data base (customer or prospect?) Origin of customer (source/medium). Browse-, (device, IP, OS etc.), click- and search behaviour Payment preference Buying behaviour, transaction data First name, surname, age, gender, email address, phone number Opt-in for commercial communication

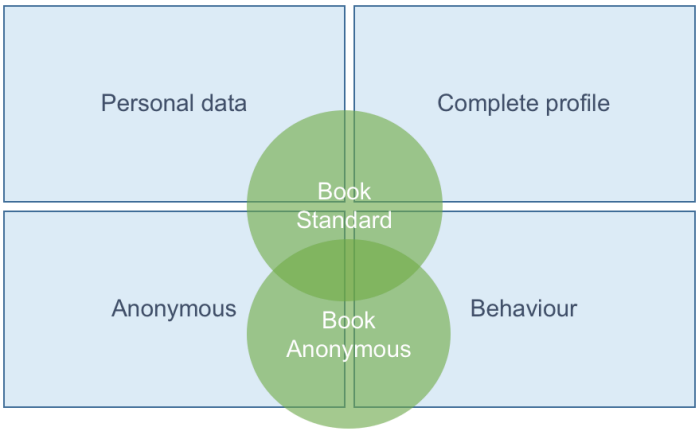
The legal framework for buying a book online is limited to the acceptance of agreements and cookies. However, the customer is currently required to share several attributes that are needed to deliver the book, such as product of choice, payment method and delivery address.

The commercial attributes are gathered (without the customer notice) from cookies or the browser (i.e. surfing behaviour, type of device, and location) or required to fill out.

Mismatch use case purchasing a book online
During the customer journey, Peter has to provide quite some personal information. Many of the requested attributes are for operational purposes. However, many attributes (like IP address, referring site etc.) are collected during the customer journey for commercial means. Building a complete customer profile will enable retailers and service providers to proactively advertise and recommend products and services.

Considering what is legally mandatory from an organisational perspective, a privacy-aware customer should be able to choose its preferred identity and be allowed to for instance use an alias, order without creating an account, deny the cookie notification and pick up the book at a point of sale. This will significantly reduce the number of attributes the customer will have to share. At the moment, only a few retailers offer customers this choice. Most retailers require a lot of irrelevant information when buying the book, forcing privacy aware customers to share a lot of information.

Key findings
The customer practically has no control or choice in what personal information to share. Some retailers do accept a purchase without the requirement of creating an account, but behind the scenes, a lot of behavioural attributes are gathered for profiling purposes anyway.



The collection of operational attributes by the retailer mostly serves the purpose of offering a better user experience when buying the book. However, the short term retailer's need for operational attributes no longer serves the longer term intention of the customer. To what extent is the customer for instance willing to again buy a book with the same retailer? The challenge for the retailer is to manage the trade of in offering a good user experience versus letting the customer choose what attributes to share. It is advised to clearly explain how extra attributes can deliver value for the customer.

3.3 Use case: Online utility contract

Product type	Brand	Customer value of attributes
• Commoditised product • Low-interest product • Not tangible • Product differentiation difficult	• Brand positioning is essential due to limited product differentiation opportunities • Positioning mostly in sustainability and digital services, like a smart energy controller	• Relevant attributes regarding behaviour at home, customers very highly value these attributes

Current customer journey for online utility contract

Orientation phase	Selection phase	Order phase
Peter Privacy compares different energy suppliers and based on this comparison he makes a first selection of suppliers. From this selection he chooses his preferred supplier and continues the customer journey. Data collection by the organisation: Page origin, cookies, scripts, screen recording, browse-, click-, search behaviour, device, IP, software, visitor recognition, profiling	In this stage, besides cookies, browse-, search-, and click behaviour, more explicit personal data is requested from Peter: Personal details Energy usage Phone number (not mandatory) Type of house (not mandatory) Family composition	During the order stage, personal details are tested and completed with contact- (email address and phone number) and payments data. Subsequently, the journey is finished with consent on the specific terms of conditions. Data collection by the organisation: Browse-, click-, and search behaviour (device, IP, used software and hardware and hardware ID)

Overview of relevant attributes from a retailer's perspective

Legal	Operational		Commercial	
Bank account number	Expected energy usage	Lack of loyalty	Website behaviour	Phone number
Previous energy supplier	Energy label	Type of residence	Residential data	Frequency at home
Personal details	Solvency	House construction year	Sustainable energy preference	Network
Age	Payments behaviour	Residential area	Multiple residents	Digital invoices yes/no
Authorised recurring payment	Unavailability in certain region	Multiple meter yes/no	Email address	Solar panels yes/no
	Yearly switch behaviour	Way of living		

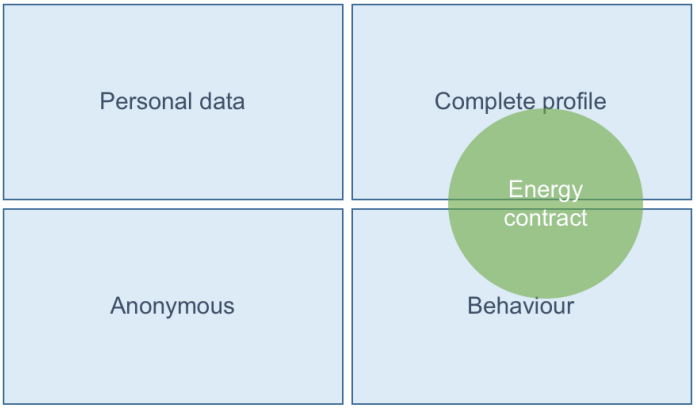
It is crucial for the utility provider to first check whether the website visitor could become a customer. An approach as 'get them in, move them up' (the visitor only needs to provide a couple of attributes to become a customer) cannot be applied to this product type. Therefore the utility provider needs to have an overview of several attributes before the actual onboarding starts, such as the postal code and house number of the potential customer.

Mismatch use case online utility contract

Since online utility is a higly commoditised business, it is important for these companies to offer additional services and products in their onboarding processes. As such, utility providers focus on gathering more behavioural attributes than required for a utility contract. Customers are reluctant to share their personal information to these utility companies as the utility already has received some behavioural attributes and only focuses on gathering more to offer complementary services.

Key findings

Collecting a lot of personal data of (potential) customers has a lot of value for the utility sector, both for commercial purposes and mitigation of risks. However, in order to deliver the contract less attributes are needed. In essence, the customer is willing to share more attributes, when it is explained how the customer can benefit.



When a utility provider has a better understanding of the customer's private situation a better and more personalised offer could be provided. For example, it is likely that a person with a non flexible full time job uses less energy than someone who has a part time job or works a lot from home. This way the service provider is able to create a competitive advantage.

Digitisation has enabled customers to change providers quite easily; they are now only a few clicks away from signing a new contract and terminate the old one. This has fueled competiveness but also signicantly increased the number of fraud incidents. Service providers are currently dealing with approximately a million of incollectable outstanding bills[2]. Additional identity checks during onboarding processes have thus become an important area of attention.

[2] www.energieleveranciers.nl/nieuWs/500414-energierekening-onnodig-hoog-door-fraude (Dutch)

3.4 Use case: Buying online car insurance

Product type	Brand	Customer value of attributes
• Low-interest product • Price/quality essential for client • Quality references often crucial in decision	• Feeling of trust and safety essential for customers • Look and feel online customer journey is important but challenging	• Generally personal data have to be shared in digital context • Additional attributes provide extra challenges to the organisation when trying to disclose insurance status as soon as possible

Current customer journey when buying online car insurance

Orientation phase	Selection phase	Order phase
Peter Privacy wants to stay as anonymous as possible to acquire a new car insurance. He searches with a new search engine and determines the right supplier. After this choice he continues his journey to the website of the supplier. The data which is collected at that particular time by the insurance adviser: browse-, click-, and search behaviour (device, IP, used software)	On the website of the selected adviser, Peter has to provide enough data (mandatory) before he is able to calculate the premium and complete the contract: Licence plate, number of kilometres, car security options, depreciation, claim free period. Data that is stored: Browse, click- and search behaviour.	Peter is provided the insurance premium and decides to sign the contract. At that particular moment, he needs to (mandatory) provide sufficient data: Initials, surname, date of birth, gender, ZIP code, house number, city. Browse-, click-, and search behaviour is stored at this stage.

Overview of relevant attributes from the retailer's perspective

Legal	Operational	Commercial
Surname Date of birth Licence plate of car Consent privacy terms Consent general terms Consent / 'sign' agreement including questions regarding previous insurance behaviour Expiring date insurance	Claim-free period Product choice (e.g. WA, WA+, all risk & additional services) Expected yearly kilometres Complete address (street, house number, ZIP code, city) Additional drivers? (e.g. unexperienced drivers like children) Phone number (for service purpose) E-mail address (for service purpose)	Phone number + consent for commercial purpose E-mail address + consent for commercial purpose Gender Education type and level Family composition Neighbourhood Maintenance / assurance history. Option of already having other insurance products at other suppliers Historical kilometres Moments and location of car usage Insurance switching behaviour

In contrast to what customers are willing to share, an insurer wants to collect as many attributes as possible during the ordering phase, even if they are not legally or operationally mandatory to deliver the requested insurance product. For the onboarding and acceptance of an online car insurance, and subsequent service provisions, the insurer requires data as is shown in above figure.

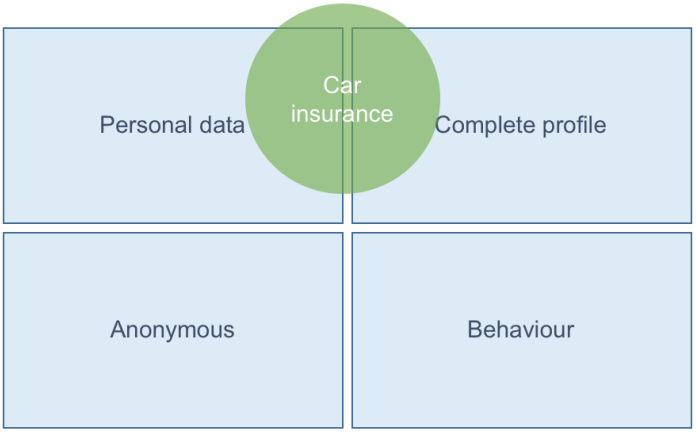
Mismatch use case buying online car insurance
Most customers understand the importance of providing these attributes. Moreover, privacy regulation provides good reasoning why this data is required and needs processing and storage.

A gap arises when the insurer requires more attributes without clearly explaining to the customer for what purpose. Or when personal data shared is used for different commercial purposes (whether or not from affiliates) without proper explanation or consent.

A good example on how value can be created through explanation and transparency is the fact that many customers are not aware that their ZIP code is an important factor in determining their insurance premium. Not being transparent about the value of these type of attributes might become an disadvantage from a customer experience point of view.

Key findings

Prices and margins are under pressure in the insurance industry. Consequently, organisations are investing heavily in straight through processing and operational excellence to remain competitive. Customers appreciate this change and are open to sharing specific attributes to benefit from a better service.

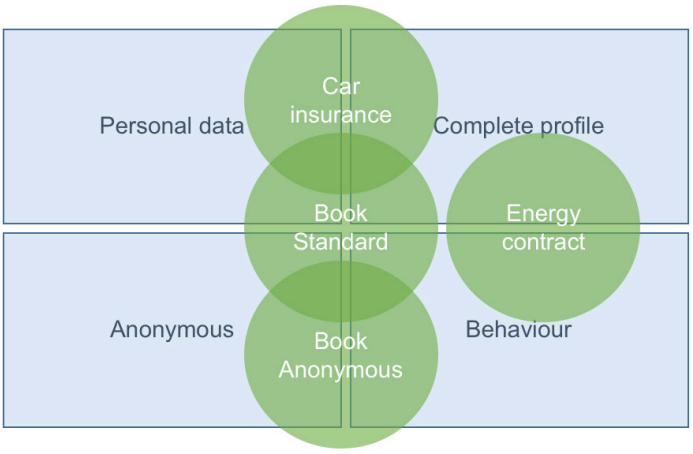


Combining different data sources, using artificial intelligence (AI) and machine learning will further improve efficiency and competiveness in the insurance market. The ideal combination of technology, data and content can bring customer centric commerce to the next level. However, it is expected that the role of the advisor will remain of added value to customers, especially in situations where technology fails[3].

When buying an online car insurance, customers are often linked to one insurer or their data is being used for cross-selling purposes. The gap between customers willingness to share and the need of the insurer will remain limited, when the insurer is transparent on what data why is gathered for what purpose.

3.5 Conclusion from the use cases

Above use cases demonstrate that there is a clear gap in the customer's willingness to share attributes and the need of attributes by organisations during digital onboarding. Without any exception, the need to maximise data and gather as much attributes as possible, exceeds the importance of facilitating customers in their need to maintain a more anonymous profile during digital onboarding. In short:



- Commercial attributes dominate during onboarding, without explaining their value to the customer;
- There is a lack of clear explanation of the purpose of legal and operational attributes to the customer when these are asked;
- Customers have no flexibility in what identity to maintain during onboarding as the retailer or service provider only foresees in a process designed around the identity and its attributes they want to obtain;
- Many attributes are collected for commercial purposes without the customer aware of this. We call these non-transparent attributes;
- Organisations primarily focus on getting a complete customer profile as soon as possible, even when this is not required from a legal or service offering perspective. Additionally, a lot of data is gathered behind the scenes without the customer's notice.

[3] http://www.focuslearningjourneys.nl/blog/2016/02/mens-blijft-verrassende-factor-in-digitale-Wereld/

Non-transparent attributes (especially the commercial ones) result in a gap between the customer and the organisation at three levels:

1. **Attributes used for other purposes**
   A good example is a phone number or an email-address that was initially shared to deliver the product and service to the customer. Organisations now often use these attributes to advertise and offer other services
2. **Attributes that are requested without clear processing purpose**
   Gender, educational level and family composition are interesting attributes for customer profiling. However, the customer will challenge organisations more and more on how these attributes add personal value to the service already provided.
3. **Privacy sensitive attributes that are requested without clear purpose**
   Regulators, as well as customers, will increasingly be more strict in the use of privacy sensitive data, such as means of transport and location tracking.

The type of product or service determines what attributes are needed from a legal and operational perspective. Customers understand that sharing these attributes will add value and contribute to their user experience. However, organisations request commercial attributes for the sole purpose of building a specific relationship with the customer. Besides general profiling, these attributes hardly have purpose when that particular customer buys only once. In general, we see that service providers only need some personal data and or behavioural attributes in order to be able to offer their services. In practice however (with the exception of ordering a book online in private) onboarding processes are now primarily designed to collect full customer profiles (type 4).

4. Onboarding is about personalisation

The expert group concludes that to create a high quality onboarding process, personalisation is the key to success. Given the behavioural inconsistencies, it is difficult to predict which process will work best. One digital identity or behavioural type will not serve the entire customer group well. Personalised onboarding is the best approach, based on the 4 types identified.

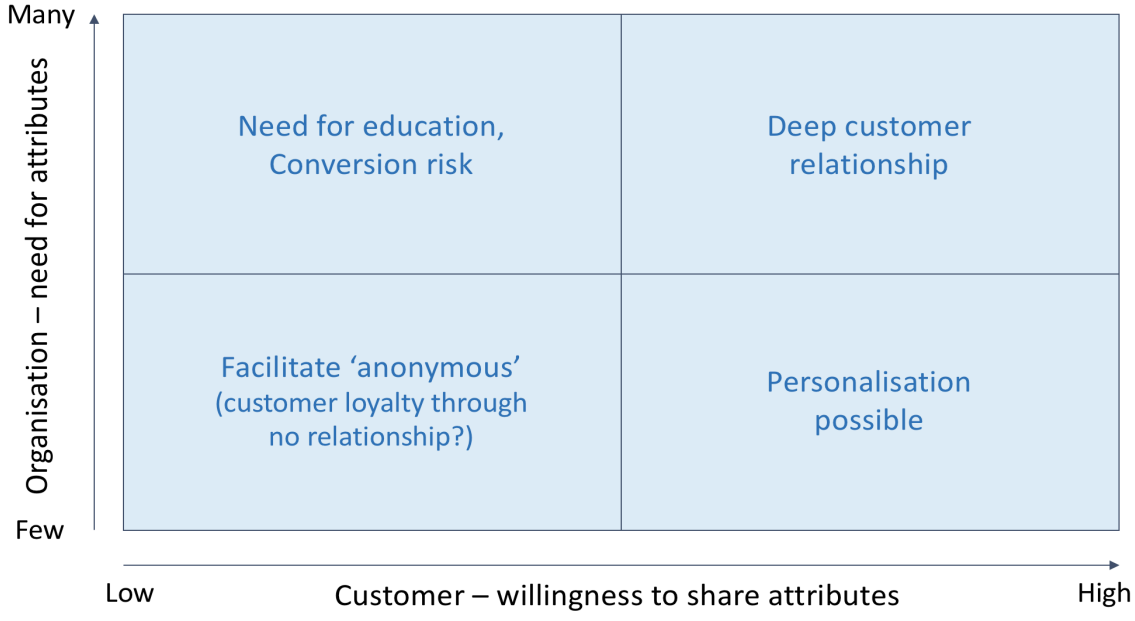
Retailers and service providers operate from different contexts and uniquely interpret attributes enabling customer identification and registration online. This unique approach decreases the feasibility of one digital identity standard on the short term. There are examples, like Verimi, where one digital identity is introduced across sectors. However, these solutions are still in development stage and will have to prove their effectiveness and value.

Customers are often not aware of their online behaviour during orientation, selection and the ordering of a product or service (privacy-paradox).

However, it appears that this is changing. An increase in 'sensitive' data leaks are making both customers and organisations more aware of the consequences of sharing, processing and storing personal data. Additionally, by introducing new regulations (i.e. GDPR and ePrivacy directives) governments stimulates this awareness. The result of the GfK survey by ShoppingTomorrow Customer research 2017, seems to underpin this statement as the majority of the respondents state that they value their online privacy over optimal servicing.

The responsibility for retailers and service providers in requesting, processing and managing customer data will increase. More data will probably result in more costs. Requesting less data could therefore be an interesting value proposition. On top, part of the responsibility to share data will shift to the customer, given them control. However, they need to be made aware. It is expected that consumers will then assign even more value to their personal attributes.

Current digital onboarding processes are focussed on data maximisation and are based on the assumption that customer loyalty depends on how much an organisation knows about its (potential) customers. Hence, it is almost impossible to stay anonymous when purchasing a product or service online. Elaborating on this trend, organisation may well be able to create customer loyalty by differtiating their approach and move to data minimalisation by offering anonymous onboarding.



5. Advice to organisations in relation to this paper

In the introduction, we highlighted that an optimal onboarding process depends on the requested (needed and/or desired) attributes versus the willingness of the customer to share these attributes.

Analysis of current processes show that many onboarding and service processes are inflexible and organisation's focus on collecting as much (commercial) information as possible and ignore the customer's willingness to share their data.

A more customer centric process should therefore requests data needed to offer the product or service in order to facilitate a smooth and secure purchase for customers. Subsequently, the organisation can of course request additional data, but clearly explain to the customer for what purpose and how it adds value. As long as this is clearly communicated, the customer is likely to share extra information. Research has shown that 73% of the customers prefer to do business with retailers who use their personal information to increase relevance in their shopping experience[4].

In the coming years, it should become clear how developments regarding data sharing will impact customer behaviour. Will they move towards completely open and digital ecosystems (data maximisation) or will we see an increase in data misuse, resulting in a move to more closed and secure environments (data minimisation)?

To stay relevant for customers, organisations should closely track these trends to understand how they will impact their context. Regardless of the result, providing a personalised onboarding process will be essential to address the customer need to choose its own identity and improve conversion rates.

Aim to create a flexible onboarding process, allowing the customer to choose whether or not to share additional attributes in exchange for added value.

When organisations need many attributes and customers are unwilling to share these, try to be transparent and clearly explain the purpose of collecting these attributes and how these attributes will be used.

This paper is the collaborative effort of expert group 'Digital Identity', participating in the Shopping Tomorrow 2017 research program

[4] http://customerfirst.nl/nieuWs/2016/12/customer-experience-trends-voor-2017/index.xml (Dutch)