



AGE VERIFICATION WITHIN THE INTERNET INFRASTRUCTURE

Bringing trust and safety to the global online community

White Paper

SPONSORED BY THE INTERNATIONAL FOUNDATION FOR ONLINE RESPONSIBILITY

Written by Emma Lindley, Ian Green and Rob Laurence

Innovate Identity Limited



Executive Summary

Table of Contents

1. **The Age Verification Landscape**
 - UK
 - Germany
2. **Industry Views on Age Verification**
3. **Conclusions**
 - Summary of findings
 - Wider considerations

“The fact is that the growth of the internet as an unregulated space has thrown up two major challenges when it comes to protecting our children. The first challenge is criminal and that is the proliferation and accessibility of child abuse images on the internet. The second challenge is cultural; the fact that many children are viewing online pornography and other damaging material at a very early age and that the nature of that pornography is so extreme it is distorting their view of sex and relationships.”

“Now, let me be clear, the two challenges are very distinct and very different. In one we’re talking about illegal material, the other is legal material that is being viewed by those who are underage. But both the challenges have something in common; they’re about how our collective lack of action on the internet has led to harmful and, in some cases, truly dreadful consequences for children.”

David Cameron - 22nd July 2013 to the NSPCC in London, UK.

The speech by David Cameron, the UK’s Prime Minister, entitled “Protecting our Children Online” once again brought into sharp focus the unregulated world of the Internet and, in particular, the ease at which children can access online pornography.

In countries around the world there is plenty of information and advice on how to make the Internet a safer place for children. Complex legislation exists that covers different markets, sectors and territories. But in the global virtual world of the Internet where geographical boundaries and legal jurisdictions have limited relevance, enforcement is nigh on impossible and, where it has been successful, raised many issues of surveillance and intrusion into private lives.

Age verification and age censorship are defences that we are all familiar with to protect children in the physical world. But how can these defences be applied to the virtual world of the Internet?

In this white paper we decided to explore this question. We considered the different approaches to age verification and how they have been applied in various sectors. We looked specifically at how age verification has been mandated in Germany as a geographical market and in the UK in the online gambling vertical sector.

We also tested the understanding of age verification systems across two sectors, comparing online gambling, where age verification systems have been in place for many years, with the adult content sector that so far has not implemented such systems.

Finally, we considered the merits and implications of these approaches and reviewed initiatives underway elsewhere in the wider context of establishing trust in identity online.

Wider Considerations

Could age verification actually have a positive impact on a company's longer term financial performance? As well as achieving greater child protection and adopting a socially responsible position, would the introduction of age verification lead to better identified customers (even by pseudonym), better brand credibility, improved revenues, profitability and thus value, less fraud, and an industry that is not under continuous scrutiny by governments, ISPs and payment schemes?

Age verification typically happens in one of two ways: within a network such as a parent setting filter controls in the home, or externally with the use of often sophisticated age and identity verification systems that have been developed and marketed as packaged solutions by specialist software companies.

Our findings show that there are polarized views on age verification systems. Users of such systems are generally very positive about their capabilities and effectiveness. Contrast this to non-users who are hugely negative!

In making the Internet a safer place for children will other governments follow initiatives similar to those in the UK and Germany? Pressure can be brought to bear on industries and market sectors through legislation, regulation and compliance in regulated markets; and with a less direct but equally effective approach in unregulated and self-regulated areas. Inevitably, there will always be resistance at first. Many barriers and objections will be raised to maintain the status quo. Typically, these will relate to costs being imposed on businesses in the first instance, then anonymity and respecting privacy, the effectiveness of age verification solutions and whose responsibility is it anyway. However, new initiatives are underway across the globe that are aimed at addressing these barriers and objections in the search to make the Internet a "better place" and enable the expansion of online services.

Further research into these initiatives could pave the way for a long term solution that meets the needs for age verification yet respects the privacy, rights to anonymity and freedom of choice of the individual.

A Case Example: Internet Gambling in the UK

During the first decade of the 21st century the UK gambling industry went through a major transformation. Advances in computer technology, Broadband and communications, and the Internet, combined with “Cool Britannia” and a more liberal shift in government led to an explosive growth in online gambling. This growth wasn’t without its problems. In this new “faceless” world many of the controls that existed in the physical world were lost. Fraud and money laundering grew as did the number of problem gamblers - many of whom started their addiction as children. A new Gambling Act and regulatory body were introduced.

Much of the industry was in self-denial claiming adequate measures were in place to prevent underage gambling and refusing to accept this was a problem. It took a report by the children’s charity NCH in 2004 to change perceptions for good. It “named and shamed” 30 out of 37 online gambling sites that did not block underage access.

Nine years on the industry has matured. Gambling sites have implemented online age verification solutions based on checking databases and government-issued documents.

Many extra benefits have been gained. Greater child protection and greater security for legitimate customers; better identified customers; brand credibility, revenues and thus value; less fraud; and, importantly, a regulated industry that is not blocked by ISPs and card schemes, and that can be heavily advertised to the 18+ community.

1. The Age Verification Landscape

In this section we review the various approaches to age verification being adopted by different market sectors in the UK and Germany. Factors that affect the approach taken and its effectiveness are primarily driven by legislation, regulation and enforcement; and to some extent by self-regulation and industry best practice. Corporate social responsibility and reputational risk, particularly with market listed companies, also comes into play as an influencing factor.

UK

Age verification is carried out in the UK across online sectors where age restrictions exist including media (such as access to video, films, games and gaming, TV and content), adult entertainment, alcohol, and online gambling. This is driven by numerous Acts that cover legislation in different sectors and industries. Many of these pre-date the Internet.

In regulated sectors such as online gambling, detailed procedures have been introduced to support legislation following industry consultation (see side panel). Trade associations provide advice on best practices to their members. The process of age verification that follows guidance ranges from simply seeking self-affirmation of age, through checks at the point of delivery, to in-depth checks of documentation and database “footprints”. Enforcement is ensured through licence conditions.

In self-regulated markets the situation is likely to be somewhat different. Whilst there are notable benefits of self-regulation in the interests of developing a fair and competitive market without the inherent costs and inflexibility of regulation, there can be some downsides. To illustrate this in the context of age verification, the self-regulated market may tend to be out of step with developing government and public opinion. Perhaps for government it doesn’t become a high priority until a major scandal breaks and public sentiment forces its hand.

In a situation where there may just be general government and public unease a collaborative industry approach is unlikely to exist. The understanding and expertise to effectively address the issues won't have come to the fore, best practice guidance won't have been written and a mix of "token" approaches to age verification will have been adopted resulting from differing interpretations and practices. All of this can suddenly change – as was the case in online gambling.

Ofcom Fine

On 16th January 2013, Ofcom, the independent UK regulator for the communications industries, fined Playboy £100,000 for failing to have acceptable controls in place to distinguish between credit cards (issued to over 18s only) and debit cards (that may be issued to under 18s). Playboy relied on self-affirmation of age. The case was brought by ATVOD, the Authority for TV on Demand.

In September 2013, Ofcom upheld an appeal by Playboy that it was not the operator of the service at the time the case was brought. Playboy produced evidence that the services were being run by a Canadian company, Playboy Plus Entertainment, beyond the reach of the UK regulator.

Ofcom Survey

81% of children aged 14 to 16 have viewed adult material online.

Only 46% of parents have filters in place on their home internet.

Source: Ofcom

The following table summarises the different methods of age verification, the sectors in which they are used, and challenges and limitations.

Method of Age Verification	Sector	Issues
Self-affirmation	Alcohol advertising Some adult content	Spoofing
Content filtering	Adult content, mobile	Parental controls to manage filters in house only Household level Can be circumvented by teenagers
Delivery point validation	Delivery of age restricted physical goods	Driver required to perform check – get signature Not an expert on ID No liability
Credit/debit card	Online alcohol sales Restricted media and content	Cannot differentiate cards held by children, such as pre-paid cards
Electronic checks of age verification databases and ID documents	Online gambling Restricted media and content	70-80% demographic coverage of adult population Open to impersonation Cost

Let us explore two of these in more detail.

Content filtering is seen as a way to restrict access to websites on a general basis, either by TLD classification or identifying key words in the site content. The UK government has been bringing pressure to bear on the mobile network operators and ISPs to introduce tighter controls and default settings.

The mobile network operators have agreed to put adult content filters onto phones automatically. To deactivate them you have to prove you

Providers of Online Identity and Age Verification Systems

There is a mature market in the UK for the provision of online identity and age verification systems. There are around 15 to 20 providers including credit reference agencies and specialist identity management companies.

Age verification is part of a suite of services offered by these companies that includes anti-money laundering, fraud prevention and credit checks. These services are also being extended on a country-by-country basis providing checks on individuals of different nationalities.

There is no formal assessment or accreditation process at present in the UK. Users of these systems tend to rely on guidance from their trade associations and regulatory bodies.

are over 18. “Family friendly” filters are also being applied across the public Wi-Fi network wherever children may be present.

Similarly, the major ISPs have agreed that when installing new home networks the family friendly filters will automatically be selected. These filters can only be changed by the account holder, who must be an adult. Proactive steps will also be taken by the ISPs to deal with the existing customer base of 19 million households by the end of 2014.

Content filtering is in many ways a blunt instrument with a one size fits all approach as the default position. They will deter the casual online user but not someone who is determined to access such content. It does have its limitations in that it may block sites incorrectly or inadvertently such as sites for reporting child abuse.

Age verification systems built around electronic databases and online document checks are provided by a number of companies in the UK. They tend to rely heavily on credit reference databases and public records and hold information on about 80% of the adult population, with negligible presence of under 18s. Age verification systems will also include other databases that help prevent impersonation (that is the misuse of another person’s identity) and the possibility of fraud.

The user journey with these types of systems requires the user to enter personal information to identify themselves: typically, name, address, date of birth, gender, and contact information. Clearly, when accessing adult content the user may want to stay anonymous or at least pseudonymous.

In practice, sectors such as online gambling adopt a range of electronic checks that are performed within the same customer onboarding process and cover age verification, anti-money laundering, anti-impersonation and fraud prevention.

Online Gambling in Germany

In January 2009, legislation was introduced that prohibited German companies from providing online gambling.

Age Verification Systems

Age verification traditionally implies a one-time physical identification where the identity is checked against a valid identity card, either at the post office (eg PostIdent), at the point of sale of a mobile phone, or at lottery offices. Deutsche Post has now developed their Postident service to produce an online version, E-Postident.

Other forms of identification are accepted when done in connection with the opening of a bank account or entering into a credit card agreement. Schufa, the German credit reference agency, has developed a service for electronic identity checks for age verification based on databases containing details such as names, addresses and dates of birth together with information on face-to-face identifications that have already been performed by banks. This approach could be considered as one step from the use of a federated identity.

Age verification systems are submitted to the Kommission für Jugendmedienschutz (KJM) for a positive assessment before entering the market. The KJM assesses both complete package solutions as well as partial solutions (modules) for closed user groups (see main body of text). At the same time, this assessment provides more legal and planning security to providers.

There are now 28 age verification systems and modules that have been positively assessed by the KJM.

Germany

Unlike the UK, German law on the protection of children is much more specific. German market sectors are strongly influenced by legal and regulatory requirements, and by their culture.

For example, Germany has a different attitude towards alcohol consumption by minors (under 18s) with the emphasis being on educating parents and children on how to consume alcohol responsibly rather than prohibition. Parental responsibility and involvement is seen as key to this. Therefore, independent age verification becomes less of an issue.

When it comes to media and published material there is clear guidance that has been set out with regard to the classification of content and the approach that should be adopted to ensure it is restricted to appropriate age groups.

The Interstate Treaty on the Protection of Minors in the Media (JMStV) covers the provision of content. It provides for “the consistent protection of children and adolescents against content in electronic information and communication media (broadcasting and telemedia services) which impairs or harms their development or education, or violates human dignity”.

The Treaty sets out what content is illegal. In terms of content considered to seriously impair the development of children and adolescents, the Treaty stipulates that it is only legal in telemedia services if the provider can ensure that such content may only be accessed by adults (as part of a closed user group). Closed user groups are discussed later in this section.

The definition of “telemedia” is set out in the Telemedia Act. It covers all electronic information or communication services (other than

The German e-ID

The German Identity Card is issued to German citizens by local registration offices. It is compulsory for all citizens over 16 to have either an identity card or a passport.

In November 2010 the new Law on Identification Cards came into effect. All new cards are now issued as electronic identity cards (known as e-ID). Existing cards will be replaced with e-ID cards when their 10-year validity period expires. By 2020, all Germans will have the new cards.

The e-ID card contains a security chip where the personal information is stored. It can be made available for online use. The card is used with a reading device attached to the PC. Identity assurance is achieved through the use of a PIN.

Service providers who accept the card as a means of identification must register to obtain government authorisation.

Source: Bundesdruckerei



telecommunication services and broadcasting) including websites, email services, video on demand, internet access, and commercial email.

The JMStV is underpinned by an industry self-regulation organisation. The Voluntary Self-Monitoring of Multimedia Service Providers (FSM) is the accredited self-regulatory body for the field of telemedia. Together with its member companies and associations the FSM is actively engaged in strengthening youth protection in the media and to control content in online media.

German law clarifies content as shown in the following table.

Content Classification	Examples
Illegal	Games sporting excessive levels of gore and violence, or displaying symbols of anti-constitutional organisations like the Nazi swastika or the SS runes.
Endangering minors	Adult only content such as pornography. It is the responsibility of the provider to ensure content can only be accessed by adults. Providers must implement age verification systems within closed user groups.
Harmful to minors	Violent games, chat rooms and communities with a minimum of supervision. Providers have to implement Basic Age Verification systems.

A basic level of age screening is achieved through the use of filters, parental controls and “intelligent” signals that are broadcast or distributed with the content. This might be appropriate, for example, for content that may be viewed by 16 to 18’s. The FSM promotes active co-operation in the industry with providers of age-sensitive content working closely with providers of filters and parental control tools to restrict access in line with the content classification. “Intelligent” signals are sent within the media content that can be recognised by the filters in line with parental control settings.

Clearly this approach has its limitations. Firstly, it relies on the involvement of parents to set up device and household filters and secondly, it has less impact with media originating from outside Germany.

Culture of Identity Cards

The adoption of a national solution for an electronic identity is much more acceptable to its population where there has been a history of identity cards. Compare and contrast this to the UK and the attempts by the then government (2001 onwards) to introduce a national identity card underpinned by a national identity database. This was subsequently abandoned in 2010 on change of government.

Gilad Rosner is a PhD Researcher at the University of Nottingham, England. His areas of expertise include identity management, credentialing and e-ID. He is currently writing a thesis on national approaches to identity assurance.

For content deemed to endanger minors, as set out in the JMStV, the content may only be distributed on the condition that the provider ensures that access is restricted to adults by means of a closed user group. To ensure the proper functioning of closed user groups, age verification systems are used that are built around physical identification that is assured with a means of identity authentication (ie assurance that the person is who they say they are).

Over the next few years the use of the electronic identity card (e-ID) is expected to become much more widely accepted. The e-ID holds all of the same data as its predecessor plus post code, and stores all of that information on a chip inside the card body. By virtue of its electronic components, the card enables a number of privacy-friendly features and can be used to authenticate citizens over the Internet.

The data protection regime and culture affecting the e-ID derives, in large part, from a seminal constitutional court case in 1983 that defined a broad set of rights for German citizens over their informational lives. E-government initiatives and other factors spurred the creation of the e-ID and it was deployed quickly and efficiently – approximately 5 years from conception to roll out. However, due to poor marketing, a lack of perceived value, and a low number of websites that can access the card, only one third of all cards have their online authentication feature turned on.

Due to the 10-year card validity, both for the original and e-ID, all German citizens will possess an e-ID by 2020, making it the largest national electronic ID infrastructure in Europe. As such, it will also be one of the largest examples of unlinked credential architectures in the world, thanks to its pseudonym features. (Source: Gilad Rosner).

Age Verification Survey

The survey was carried out by Innovate identity in June and July 2013.

Eight questions were asked.

1. Is the company you work for currently using an independent age verification system or other system?
2. If you do not use an independent age verification system please confirm how you confirm customer's age.
3. Describe the sector you operate in.
4. Rate your confidence in using an independent age verification system.
5. In relation to the previous question, explain your reasons for your rating.
6. Pick the words that come to mind when thinking of independent age verification systems.
7. Do you think there could be any improvements in age verification in your sector? If so, what?
8. Please provide any further information on your views about age verification systems.

2. Industry Views on Age Verification

Regulators and regulations are rarely embraced with enthusiasm. Although they principally exist to maintain a fair and orderly market, organisations see increased costs and barriers to doing business with their customers, and potential reductions in profits and shareholder value. In truth, reality can be somewhat different. Regulations are applied uniformly across a market. Often they are intended to protect the genuine, legitimate customer, thereby increasing the customer's confidence and propensity to spend more on products and services.

As part of this review into the use of age verification methods we carried out an industry level survey across the adult content and online gambling sectors to test views of age verification. Comparisons were drawn between organisations that used purpose-built independent age verification systems and those where no such systems were in place.

The principle findings are shown in the following table. Group 1 comprised non-users of independent age verification systems exclusively in the adult content sector. Group 2 comprised a mix of online gambling and adult content companies who have implemented independent age verification systems.

	Group 1 – Non-users of independent age verification systems comprising adult content providers only	Group 2 – Users of independent age verifications systems comprising 75% online gambling and 25% adult content
Methods used to verify age	Mix of credit card checks, self-assertion, ID documents, content filtering or no checks performed	Generic, independent age verification systems
Confidence in age verification systems (range 0 to 10 with 10 being highest)	4.5	8.75
Views on purpose-built age verification systems	84% negative 16% positive	71% positive 29% negative
Could age verification be improved in your sector?	Mix of views	Generally well-satisfied with systems in place

Key Findings

Users of independent age verification systems

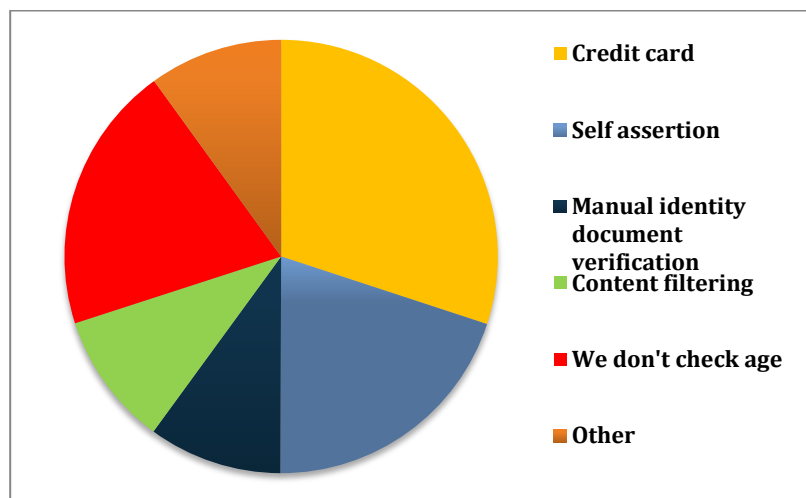
- high level of confidence in methods used
- positive views on address verification systems
- well satisfied
- high response rate to survey

Non-users of independent age verification systems

- mid-level confidence in methods used
- extremely negative views on independent age verification systems
- low response rate to survey

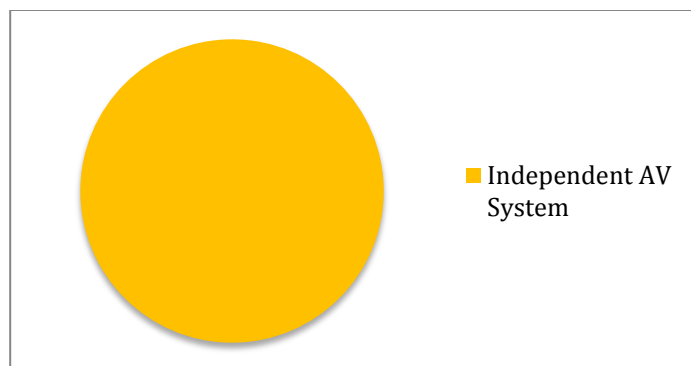
Here is a breakdown of the findings.

Group 1 – Methods Used to Indicate Age



In this group there are a variety of methods used. Well over half the respondents either used methods that have proven to be flawed (credit card and self-assertion) or do not check age at all.

Group 2 - Methods Used to Indicate Age



All respondents in this group use independent age verification systems.

Information gathered from the participants in Group 1 that have not implemented independent age verification systems shows that there is a high level of negative views (84%), whereas in Group 2 where age verification systems have been implemented there is a high degree of

A Selection of Views

“Verifying age accurately online is nearly impossible so anyone who claims to do so is misleading the customer. Moreover, it is often pointless because even if age is verified how do you know that the user is who he or she claims to be?”

“My company has used its own proprietary age verification software and practices for the past 15 years. We don’t believe in minors having access to online adult content or an adult-oriented internet platform. It’s really that simple. Consumers probably trust us due to the fact that we don’t use a third-party service that would compromise users’ personal information.”

“Age verification systems without identifying the person and matching the person to the ID in real time are unreliable.”

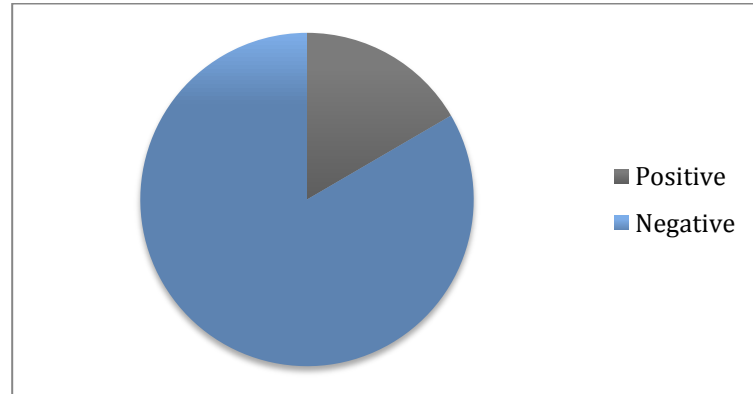
“They should be designed in a way that doesn’t impose any notable burden on adults, making access to the material in question significantly more difficult than it otherwise would have been; moreover, they must not compromise adult privacy any more than such privacy is already vulnerable via all online activity.”

“The options of being able to match against multiple datasets increase the confidence of the returned information. Within this, the ability to adopt a risk based approach is of paramount importance.”

“The systems are still in their infancy in terms of their application to the adult sector. There’s still refinement needed to ensure the accuracy of both positive and negative responses.”

positivity (71%). Amongst the online gambling respondents in Group 2 this degree of positivity increased to almost 93%, with cost being the only negative factor.

Group 1 – Views on Age Verification Systems

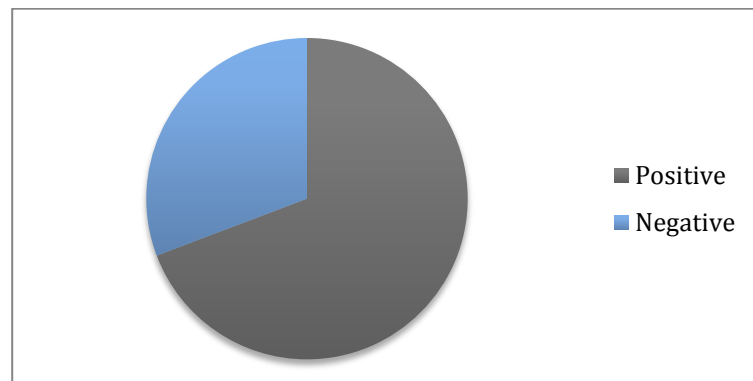


Some of the words used to describe thoughts on age verification systems:

Negative
 Ineffective
 Un-trustworthy
 Risky
 Unclear
 Costly
 Difficult to use
 Bad user experience
 Slow

Positive
 Secure

Group 2 – Views on Age Verification Systems



The Cost of Age Verification

So far, we have not considered the issue of cost. In Germany, the onus and cost of the management of e-ID cards stays primarily with the citizen. The cost to acquire a card is €28.80. The cost of authenticating an e-ID is much less than full ID verification. In the UK the onus and identification costs ultimately sits with the merchant. Ultimately, this becomes a barrier and, unless the merchant operates in a regulated market where such checks are mandated, will result in push back, delay and avoidance.

Costs based on a transactional operating model for independent age verification checks generally prove prohibitive and only become viable where there is an ongoing customer relationship such as in a subscription model.

Typically, age verification checks in the UK will range from 40p to £1 per check, depending on databases accessed and volume discounts agreed with the provider.

Negative

Costly
Bad user experience

Positive

Secure
Safe
Easy to use
Easy to technically integrate

Perhaps the positive responses are due, for the most part, to the fact that age verification is a licence condition of the majority of the responding companies and that the systems do what they are supposed to do in a straightforward and acceptable way.

The polarisation of views between the two groups is further demonstrated when looking at respondents' confidence in these systems. Where respondents had not implemented systems the group score was 4.5 (out of 10) compared to 8.75 within the group that had implemented systems – almost double.

Overall, it is clear that those organisations that use independent age verification systems have a much more favourable view of them than those without such experience.

One of the critical concerns of the first group focused on privacy of individuals using services from these sites. Their view was that age verification was a method being used to control this sector rather than one to honestly protect children. Understandably, given the nature of the services provided, it is unlikely that customers will be completely comfortable with giving their details, which could lead to customer attrition at this stage.

Respondents from both groups indicated that they thought banks and credit card issuers could be doing more in helping identify card holders' ages. This is something they have continually resisted, perhaps legitimately when you consider issues of privacy and consent, claiming that a payment card should not be used as a proof-of-age token.

Changing Views

The views held by organisations in the adult content sector mirror those of the online gambling sector in its infancy and prior to the UK Gambling Act coming into force in 2005. The online gambling industry was driven to change by the rise in underage gambling, research to link this to young, problem gamblers and subsequent government and social pressures. It had to change to ensure its continued existence.

Change, though, has brought wider benefits to organisations. Investors and owners look for sustainable business models and revenue streams without fear and risk of government intervention, over-regulation or even prohibition. A market and company with legitimate customers, better identified customers and resulting brand credibility, an ongoing revenue model, low fraud rates and, ultimately, minimal intervention has the potential to deliver better value in the longer term.

3. Conclusions

Summary of findings

In this paper we have considered how the issue of age verification and controlling access to age-related content is being handled in the UK and Germany across a number of market sectors. Between the two countries there are differences yet similarities.

At national government level, Germany is perhaps more advanced in terms of legislation controlling access to media and content.

Filtering of content and parental controls are promoted in both countries yet Germany has taken this a stage further to “join-up” the process between the content provider and the in-home filters and controlling software. More emphasis seems to have been placed in Germany on the state setting out the policies and supervision rather than the solutions, with the responsibility residing with both the content providers and the parents and each assuming their responsibilities.

The UK Government has started to exert pressure on the ISPs to voluntarily put a basic “shield” in place.

When it comes to higher levels of assurance around age, the UK has led the way for some years with the development of online identity and age verification systems. The major providers in the UK have extended their services to cover international markets around the globe.

The introduction of the e-ID card in Germany, though, offers a way for age verification systems to be simplified (in Germany), both for the provider and the customer. It has the potential to be the universal approach by 2020.

Federated Identity Programmes

Simply put in the context of public facing online services, federated identity is about providing individuals with a means to create a digital identity and to be able to use that identity to access multiple sites without the need to register with each independently. Schemes are emerging at national level. In Germany, the scheme is based on e-ID which we reviewed earlier in this paper. In the UK, the Government's Cabinet Office is leading the way with its recently announced Identity Assurance Programme (IDAP). Within IDAP, individuals will be able to register and create a digital identity and credential with one of a number of private companies accredited to hold your personal data.

The UK programme is governed by a set of nine principles covering areas such as user control, transparency, identity portability, data quality and data minimization. The nine principles are designed to protect individual privacy and put the individual in control. In sensitive situations the amount of personal information shared with an online site could be restricted to, say, a pseudonym and confirmation of age, safe in the knowledge that behind this exists the real, verified identity of an individual.

As well as looking at the different approaches to age verification, we have also reviewed the UK's online gambling sector where tight, demonstrable age verification controls at the point of entry are the responsibility of each gambling site. Here we have sought and compared the views of organisations in this sector with those in the adult content sector where, generally, only basic age screening has been adopted.

The difference in views between the two groups was dramatic.

Wider considerations

Although this paper has focused on two countries that have different approaches to age verification, many other countries are looking to develop models to address the online identity issue. Organisations such as the Open Identity Exchange bring together a cross-section of private and public sector organisations with the common goal to enable the expansion of online services through the development of trust in online identities through the establishment of trust frameworks. In the USA, Canada, Australia, New Zealand and the UK, work is underway to develop federated identity programmes and schemes.

In the wider and more visionary context, regulated and self-regulated industries may need to consider and evaluate whether age and identity verification in the virtual world of the Internet needs to be addressed at an international level rather than developing a fragmented approach based on state legislation and regulation. The opportunity may exist for an industry to take the lead through a programme of self-regulation backed by industry wide solutions that incorporate the flexibility to accommodate national variances.

It's a big task though. Many objections and questions will arise. Why do we need this? What will be the consequence if we do nothing? If we introduce a policy and standards how can we ensure everybody will adopt them?



But inevitably is it going to happen? And if it does, will it be driven by governments or industries?

In this paper we have discussed current approaches to age verification in the UK and Germany. We have shown how widely differing views have formed from the alternative perspectives of operating within a tightly regulated sector where age verification is a licence condition and a self-regulated market where a less stringent approach is currently in place. We have also given an insight into the future direction of identity (and age) assurance and posed the question as to whether it will provide a way forward for age verification within the Internet infrastructure. Many believe it will. Should it now, therefore, be the area that deserves further investigation?

For further information about this white paper or to discuss age verification within online communities, please contact

IFFOR (info@iffor.org)

Innovate Identity (info@innovateidentity.com)