

DIGITAL ID

DRIVING GLOBAL
BUSINESS OPPORTUNITIES





WHITE PAPER

Digital ID: Driving Global Business Opportunities

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PART 1

The Identity Gap and its Impact on Individuals and Government

Introduction: About Digital ID and Its Importance

In this white paper, we examine the impact of digital ID (identity) on an individual, organization, and government level. We explore the benefits that digital ID brings to the financially underserved and how implementing digital ID can positively impact the performance of a country's GDP. In the second part, we study the relevance of digital ID in an organization and how a robust digital ID verification system can play an essential role in ensuring organizational effectiveness in a global institution.

As humankind has evolved, so has the individual's relationship with each other. Within societies today, individuals regularly interact with others whose identities they cannot vouch for. Hence, some form of ID documentation is required that can provide information about the person they're interacting with. This identification offers necessary trust in the form of birth certificates, driving licenses, national IDs, passports, and similar documents that verify the identity of the individual. With the evolution of technology, IDs have also evolved from paper-based to digital.

Digital ID can be described as an electronic compilation of identity attributes digitally captured and stored, which define a person within a given context. It provides remote assurance of the identity of a person and can be used in electronic transactions.

The word 'remote' plays an important role here. This is one of the main differences between a digital ID vis-a-vis a physical ID. The fact that identity attributes can be accessed and verified digitally through independent databases has changed the paradigm of verification across geographies. Digital IDs have other benefits, including the potential to provide entities

with new and efficient ways to reach and serve their populations, especially the most disadvantaged. ID systems that have universal coverage also play a crucial role in improving government efficiency, accountability, and transparency. In addition, these digital capabilities reduce operational overhead and mitigate theft that can occur in paper-based systems, such as entitlement payments not reaching their intended recipients.

Digital ID significantly impacts every level of society, from individuals to entire nations. Given the crucial importance of digital ID, countries around the world have started to convert their paper-based systems to a computerized one. The role of digital IDs impacts all the stakeholders of society, which, in turn, can be seen in its role in developing the GDP of a country.

Along with individuals, **digital IDs play a crucial part in accessing opportunities for enterprises, both small and medium.** From validating entities that people are conducting business with to understanding those who are helping you to create the business (employees and partners), business verification has become an integral part of modern business operations.

The Identity Gap and Its Impact

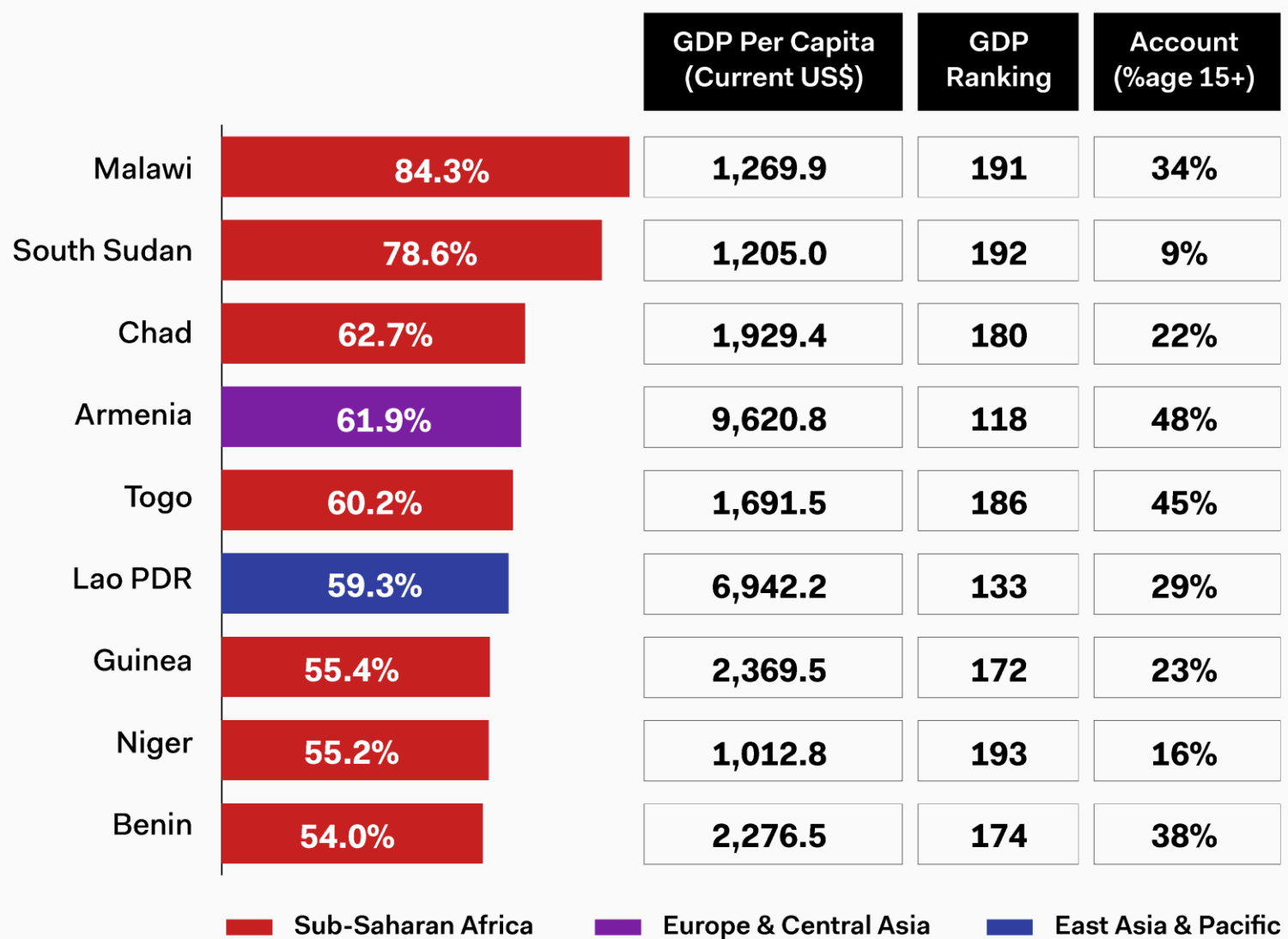
Identity plays a vital role in enabling individuals to access government services and benefits.

These benefits are usually targeted at the lower strata of society to provide basic facilities to an individual. Without a robust ID system, it becomes difficult for governments to track the right recipients and will lead to incorrect delivery of these services.

Identity gaps refer to the difference in the count of individuals who have a national ID and those who do not. The further the identity gap in a country, the more difficult it becomes for governments to ensure the accurate delivery of services.

The table below analyzes the correlation between economies where more than 50% of the population does not have a national ID (identity gap) against their GDP per capita (current USD) and bank accounts opened. The account column shows the percentage of the population over 15 years of age with a bank account in their names.

Country-Wise GDP & Share of the Population (Age 15+) without National IDs



We can see that most of these countries do not fare well in GDP per capita and rank amongst the poorest in the world. For the estimated one billion people globally who lack any form of legally recognized identification (according to a World Bank study¹), digital ID represents a path to rapid financial inclusion by helping to provide access to crucial government and financial services that they may currently be denied, including financial services, government benefits, and access to employment.

For individuals, three main barriers² are cited in opening a bank account:

1. **Lack of required documentation**
2. **Proximity to branches**
3. **High minimum account balances and fees**

Across emerging economies, **18% of unbanked individuals** claim lack of documentation as a primary account barrier, with **21% citing distance** from branches and **27% citing the costs** of financial services.

Digital ID plays an important role in providing access to essential financial services. Opening a bank account has become a lot easier and less time-consuming as digital IDs are being accepted as Know Your Customer (KYC) verification documents.

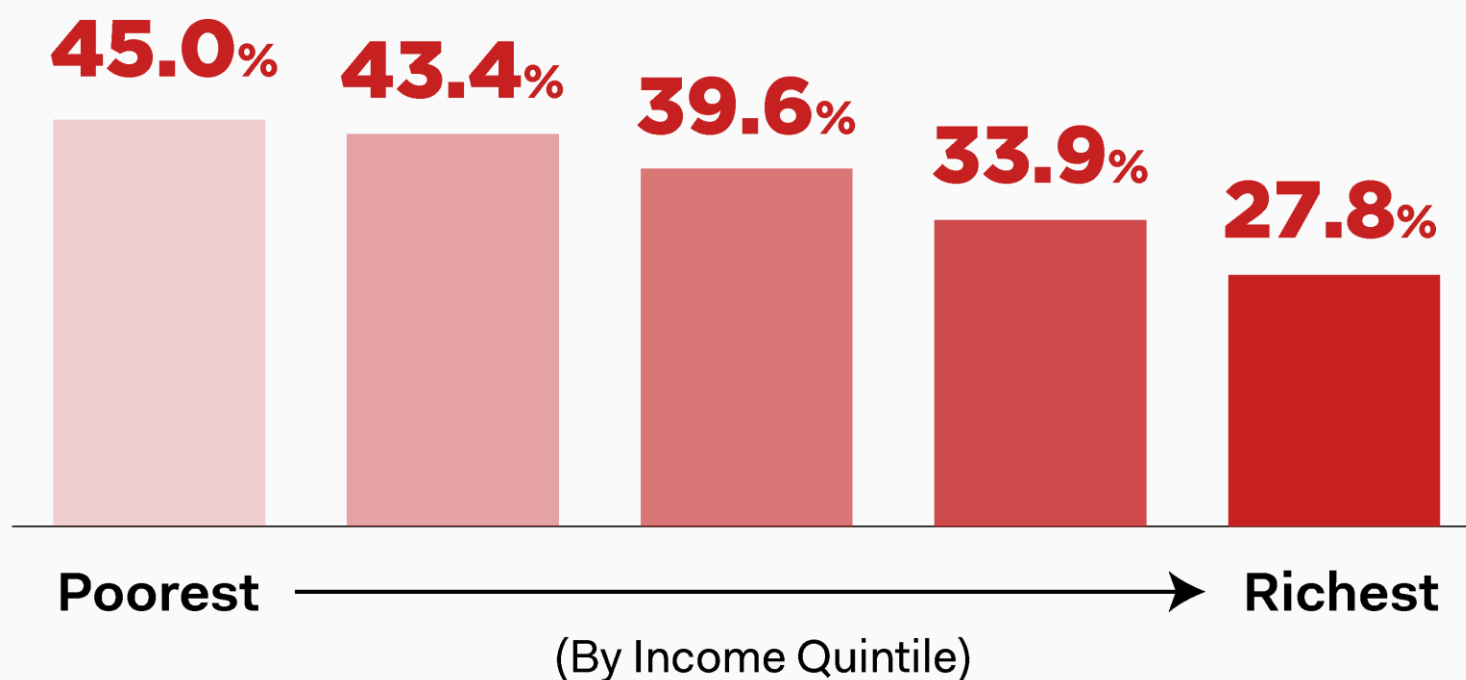
According to the Global Findex Survey released by the World Bank Group³, **515 million adults worldwide opened an account at a financial institution or through a mobile** money provider between 2014 and 2017.

In other words, **69% of adults now have an account**, up from 62% in 2014 and 51% in 2011. The survey shows that the digitization of government payments, which is supported by digital IDs, could help to reduce the number of unbanked people by 100 million globally. As more people are added to the financial fold, they will have easier access to government subsidies, accurate tracking of income, and better opportunities to save and invest, thereby improving their overall financial well-being.

The majority of the people who are part of the identity gap live in sub-Saharan Africa and South Asia. They are typically members of the most vulnerable groups. Women are less likely to have official proof of their identities.

According to the Findex Survey, **one out of every two women in low-income economies does not have a national ID** or similar ID credential. Besides, refugees, people with disabilities, and people living in rural and remote areas often face the biggest hurdles in obtaining official IDs.

Share of Adult Population without an ID, by Income Quintile



In the table above, we can observe that there is a correlation with national ID and the income levels of individuals. **The majority of the people without a national ID fall under the lower-income groups. In most of the cases, people belonging to these groups are not even aware of a national ID** and how to enroll for one. A lot of this boils down to the vision of the leadership in countries to undertake the process of initiation.

Women are some of the greatest benefactors of financial inclusion through a national ID.

Access to a national digital ID enables them to open bank accounts as individuals or through collectives such as self-help groups. A digital ID allows users to access services remotely through smartphones. They can access services and make purchases online through digital identity verification and authentication. If women are provided access to financial services in emerging economies, it could lead to more considerable savings for the whole family.

Women also tend to spend more than men on important aspects such as food, education, and healthcare, thereby improving family welfare and productivity.



With digital IDs, Micro, Small, and Medium Enterprises (MSMEs) also benefit from easier access to credit and the ability to undertake digital transactions.

According to a study by the International Finance Corporation, 40% of the roughly 140 million MSMEs in emerging economies lack full access to credit. The credit gap amounts to an estimated \$718 billion⁴.

Financial inclusion through digital IDs can help MSMEs access cheaper credit more swiftly, thereby enabling them to compete with large corporations and handle their operations more effectively. Using digital IDs such as legal entity identifiers (LEIs), these MSMEs can also trade globally and ensure that there is a steady demand for their products at sustainable prices. By reaching out to a broader global audience, they are ensuring that they need not depend solely upon a regional market for demand anymore. They can supply their goods at various markets at prices determined by prevalent market forces, thereby making sure that they can offset fall in demand in one market with a rise in another.

Once a customer successfully opens an account online, they set up their login credentials to access their account securely.

These login systems, also referred to as **identity access management**, typically include a Personal Identification Number (PIN) or username-password to authenticate the user.

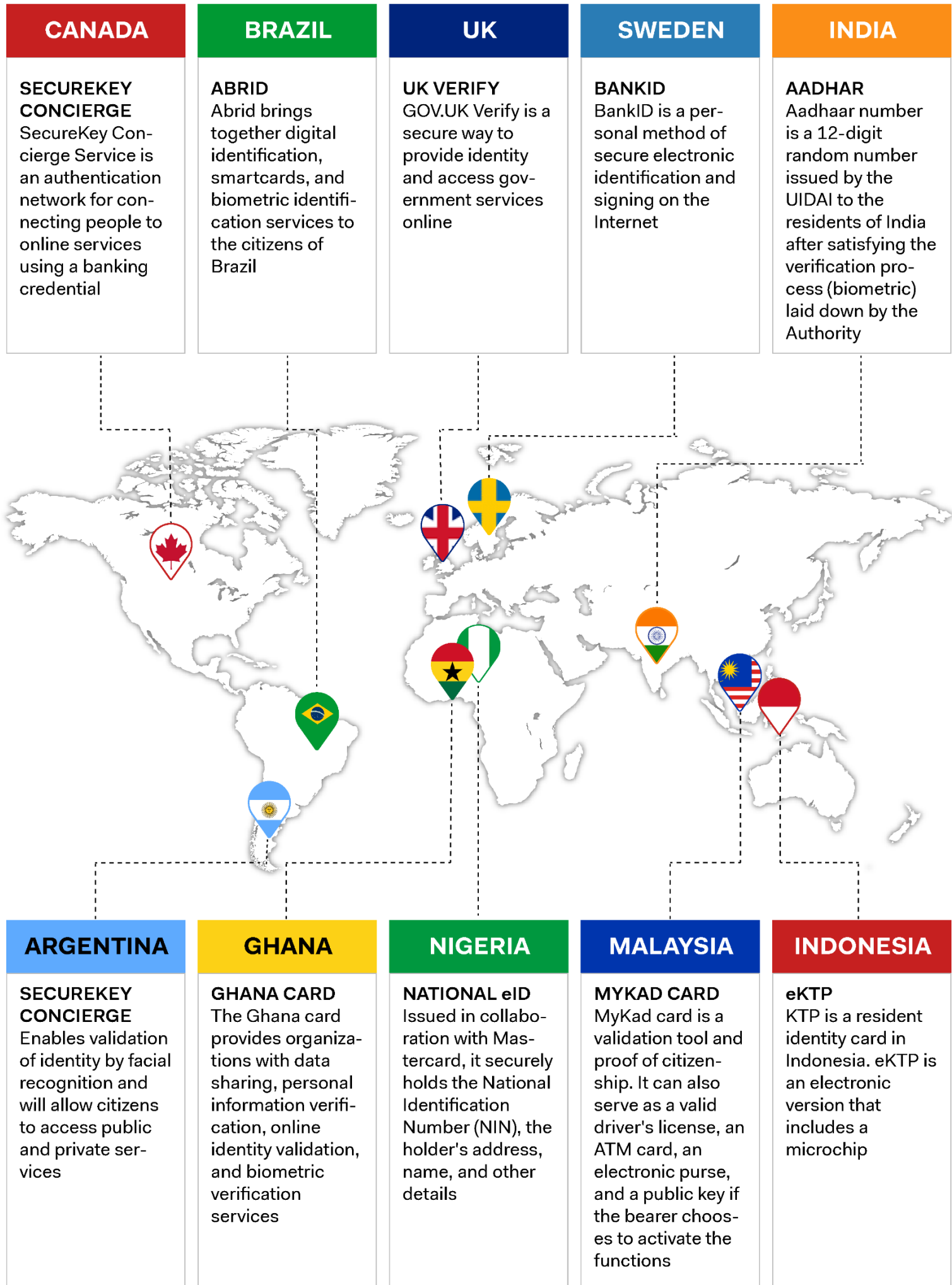
However, these are prone to hacking, and there is often news of financial institutions bearing the brunt of online attacks and losing individual information on ownership of products such as credit cards.

Almost **three million fraud cases were reported to the Federal Trade Commission in the US in 2018**, and ID theft accounted for nearly 15% of these cases and was the third most common type of fraud. In 2018, there were 1,244 data breaches and almost 450 million exposed records containing personal information⁵. Banking and business make up two of the three top industries where data breaches happen.

In such a scenario, **multi-factor authentication** can help to reduce fraud significantly. In Europe, payment service providers are required to implement strong customer authentication (SCA) owing to the EU Payment Services (PSD2). These companies have developed the 3D Secure 2.0 protocol that adapts to SCA using MFA (multi-factor authentication), which includes **OTPs, biometric authentication such as fingerprints or facial recognition, and QR codes**.



Digital ID Systems Across the World



In some countries, **banking and other financial services industries have developed private digital ID systems** that are built on top of national IDs and use the value of these ID systems for greater reach. In the recent past, digital solutions have been developed for general purposes as an overlay of legal identity. These services seek to offer a general-purpose authentication that can be used to avoid the need for passwords and other security

credentials. These services are also being used in the financial sector. **The FIDO Alliance and Mobile Connect are examples of services based on federated architectures.** In this model, a set of underlying legal IDs and information held with private sector institutions could be used, and the user chooses which legal ID or private sector information source is used to assert their identity in a particular context.

Opportunity Analysis Among the High, Medium and Low Adoption of Digital ID for Businesses

Businesses **in countries where the identity gap is small do not need to worry about spending time, money, and effort** on bringing people to the fold of services. It is more about ensuring the quality of services and the option of choice. In countries with a low identity gap, a smooth KYC process makes customer onboarding faster.

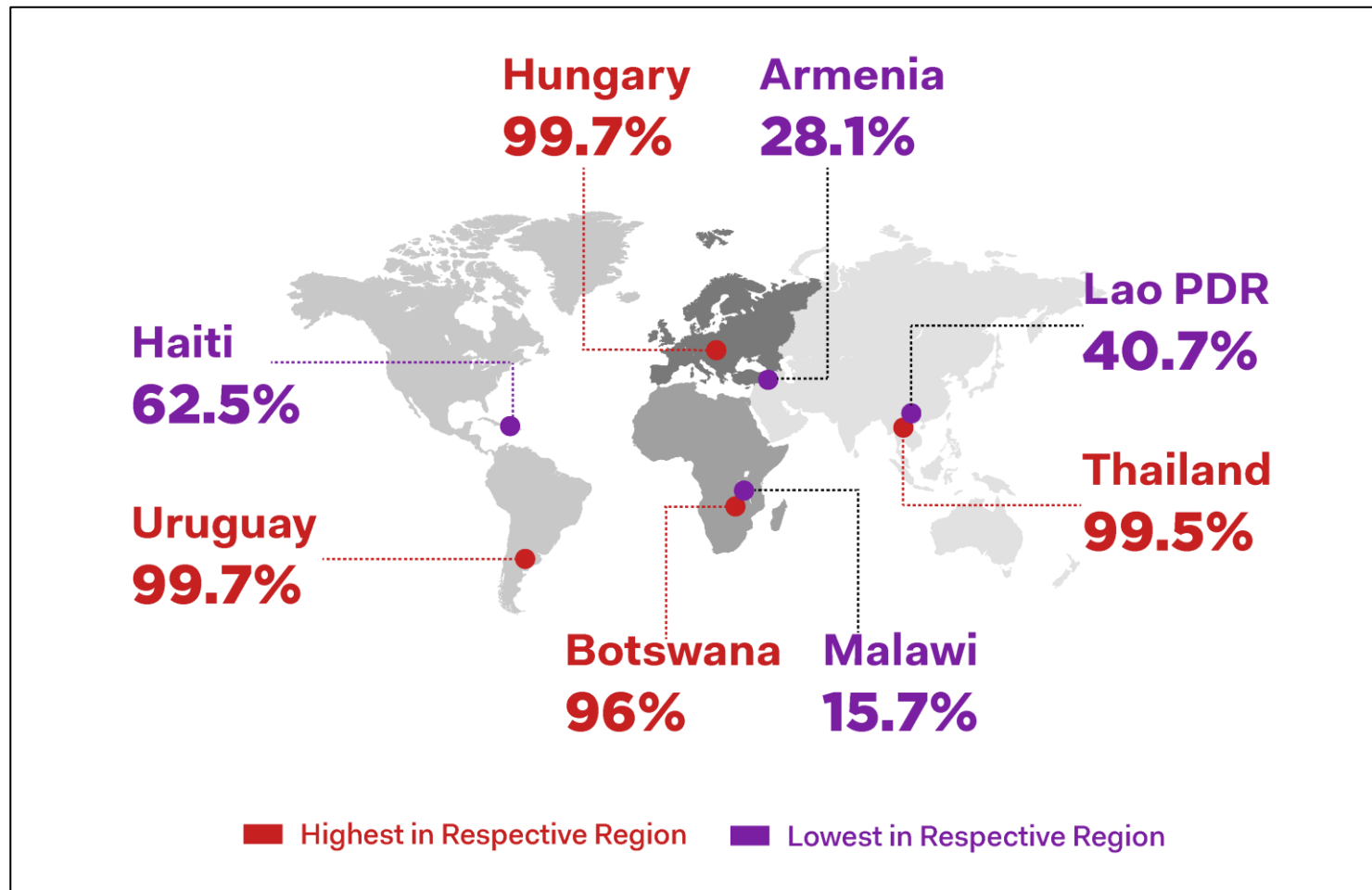
This leads to quicker penetration of services. **Many countries also store additional information about its citizens, including financial information.** This makes it easy for third-party vendors such as financial service providers to access such information and offer products such as quicker credit, insurance policies with customized premiums, and even credit cards with dynamic interest rates.

Once a country achieves greater adoption of digital IDs, it becomes easier to offer additional services such as digital payments, which are built on top of the digital IDs. In April 2011, the **US government launched The National Strategy for Trusted Identities in Cyberspace (NSTIC)** initiative to improve the privacy,

security, and convenience of sensitive online transactions through collaborative efforts with the private sector, government agencies, advocacy groups, and other organizations. The initiative imagined an online environment where organizations and individuals could trust each other because they authenticate their digital identities and those of organizations and devices. It was promoted to offer more robust identification and authentication while protecting privacy by limiting the amount of information that individuals must disclose.

With **89% of the population covered under Aadhaar**, India was able to bring almost 85% of the population into banking channels. The country took this a step further by creating an **interoperable digital payment system called the United Payment Interface (UPI)** using bank accounts. Today, UPI records more than a billion transactions a month, all thanks to the penetration of bank accounts and the spread of mobile and internet services. A lot of new financial technology players have entered the field, offering digital payments on top of the UPI rails.

Regional Analysis for Countries with the Lowest and Highest Adoption of National IDs



In countries with a higher identity gap, businesses find it challenging to reach out to a larger population as their details are not available in the national ID database. Details of new customers are not available, and they have to make an extra effort to first identify these customers and then validate their ID for onboarding. This is especially true in financial services.

On the other hand, higher penetration of national IDs and narrower spread of banking services provides its own opportunities.

For example, Nigeria has the largest unbanked population in Africa (over 50 million). This made it difficult for payment providers to reach a large section of the population who do not have a bank account. The government in Nigeria has issued a card that runs on a payment application that turns the Nigerian national ID card into a tool for payments or can be used at ATMs or for transfers. The card was issued in collaboration with Mastercard. Mastercard found it easier to reach a larger audience through linking up with national ID than through the regular banking channels.



CASE STUDY

MODELO PERU



Digital ID Adoption Leading to Financial Inclusion — Modelo Peru

- Modelo Peru is a collaborative effort by various agencies in Peru**, such as financial institutions, government, telecommunications companies, and large payers and payees to set up a digital payments platform with RENIEC Digital ID as its core database. **RENIEC is the premier national ID system in Peru**; 98.9% of citizens have the DNI (ID) card issued by RENIEC⁶.
 - In 2016, **71% of the Peruvian population, numbering close to 10 million**, did not have a bank account⁷. To bring financial services to this vast majority of the underserved, the Peruvian Bankers Association (ASBANC), decided to launch BIM (Billetera Móvil). It works through USSD and SMS messaging on a wide range of mobile phones, including those most often used by the lower-income population.
 - By integrating Peru's national digital ID system and payment applications via a mobile phone, an **ID-backed payment system was developed**. The digital ID is linked to all accounts, enabling enforcement of various transactions and account balance limits. Users do not need a pre-existing bank account, access to the internet on their mobile, or even calling credit on their phone accounts. They can sign up and open an electronic wallet directly on their phones or at physical points-of-sale (POS) nationwide already operating with BIM. The wallet, interoperable between its issuers and the three most crucial mobile telephone networks in the country, was initially offered by nine electronic money issuers.
- By 2018, 25 issuers had joined the platform.
- Through their mobile device, users can perform transactions such as:

 - **Cash-in/cash-out at agents**
 - **Balance checks**
 - **P2P payments**
 - **Airtime top-ups**
 - **ATM integration**
 - **Utility bill payments**
 - **Merchant payments**
 - The number of transactions on BIM **increased from 8,000 in November 2016 to 245,000** in June 2017. If ecosystem partners can scale up the payment system, it can bring more than 60 million people into the formal economy. This will lead to more people accessing government services through official channels and also enabling them to track their payments and expenses.
 - Modelo Peru is a perfect example of how financial inclusion can be achieved through a digital ID**. The fact that the digital payment system was built with the digital ID at its core made it easier for people to adopt it, even for those who did not have access to financial services. With 95% of the population of Peru living in an area with mobile coverage and at least 70% of the population having a mobile phone connection, it made logical sense to include mobile operators in the mix. By enabling interoperability between the mobile operators, BIM ensured that no mobile user would be left out of the payment system.

The Role of Digital ID in an Ideal World

In an ideal world, everyone would have access to digital IDs, and it would be the perfect key for an individual to access multiple services, from the government to private enterprises. It would ensure accountability from multiple stakeholders and bring order to the various public and private sectors that are working towards the welfare of the people.

Digital ID would impact various sections of society, and its importance in an ideal world is highlighted below:

- Physical or digital ID would be an important aspect of the global integration of citizens from different countries. One **could not travel to another country** without a valid passport or a digital ID, which would be recognized in lieu of a passport.
- Digital ID would also be very important in entering into transactions with foreign entities. From **buying goods online** to entering into agreements with international organizations, digital ID would play an important part in facilitating global trade.
- In a utopian world, where everyone has a digital ID, opening an account beyond the national borders of the citizens would be a **new opportunity** that helps to spread the best of products and services from all the financial players around the globe.



Digital ID and accessing government services

Digital ID would also play an essential part in enabling citizens to access services offered by their **government, such as public distributions systems, healthcare, and education**. It would also provide access to the various rights of an individual, such as voting, formal employment, and permission to drive.

- It is easy to discount the role of an ID for a regular individual who has access to private enterprise in some of the above cases. However, for the underprivileged, who depend on government services for their daily existence, **access to an ID document is of utmost importance**.
- It is crucial for the **government to ensure that its public distribution systems** reach the intended audience. ID systems, therefore, play an important role in ensuring that government-to-people (G2P) transfers — such as cash transfers, wages, and subsidies — reach their intended users and are not lost in leakage. Digital ID systems can improve services by creating a foundation to build new modes of delivery and increasing the overall efficiency of administration.
- Digital ID and other trust services form part of the core foundation needed for successful digital economies. When enabled by **digital ID infrastructure that brings people and organizations online**, digital ID and trust services can be leveraged by government and commercial platforms to facilitate a variety of digital transactions, including digital payments.
- In Europe and Central Asia, bank account ownership **rose from 58% of adults in 2014 to 65%** in 2017. Digital government payments of pensions, wages, and social benefits enabled that increase. Among those with an account, 17% opened their first bank account to receive government payments. The share of adults making or receiving digital payments **jumped from 14% to 60%**. Digitizing all pension payments could significantly reduce the number of unbanked adults by **up to 20 million** in Europe and Central Asia.⁸

Digital ID and the private sector

- Digital ID systems have an important hand in easing the onboarding of clients for various services handled by the private sector. **The verification process is a crucial part of the Know-Your-Customer phase in onboarding**, and it can be controlled in a quick and streamlined process if the customer already has a digital ID. Banks have been fined heavily for not adhering to Anti Money Laundering (AML), Combating the Financing of Terrorism (CFT), and KYC requirements.
- For example, **HSBC was fined \$1.9 billion** for allowing possible money laundering to occur through its institution⁹. Trustworthy ID credentials can thus reduce operating costs for private firms associated with ID verification for regulatory compliance, widen customer bases, generate new markets, and support business-friendly environments.

Parameters That Countries Must Address in Adopting Digital ID

To make use of the advantages mentioned above, it is imperative that governments create robust digital ID systems. The ID systems have to factor in various aspects such as ease of setup, registration & management of users, data privacy, and the interest of stakeholders.

Governments should consider two main factors when setting up a digital ID system with respect to the process and back-end systems:

1. **Policy, planning, and processes**
2. **Infrastructure – back-end systems**

1. Policy, planning, and processes

It is imperative to have a unified legal framework that includes the laws, codes, regulations, and practices that govern and support the ID system. The legal framework includes aspects such as scope & purpose, eligibility requirements, creation of an entity to manage the process, interoperability, data sharing, and transfer policies, and grievance redress mechanisms.

The safeguard portions of the regulations seek to mitigate the risks of an ID system, including those related to data privacy, protection, and cybersecurity. Many countries have adopted data privacy laws that apply not only to the ID system but to other activities that involve the processing of personal data. These include international standards on privacy and data protection such as the GDPR in the EU, which typically have broad provisions and principles specific to the collection, storage, and use of personal information.

- **People** are the center of every digital ID system and should be consulted at every step of the process to discuss their concerns and get feedback. These concerns could be related to the collection, use, and protection of sensitive personal data. Governments should address these concerns in a transparent manner, and convey the importance of a digital ID system to their citizens. The management of an ID system, including the organizations, staff, and procedures, is critical to ensuring that the system is trusted and sustainable. The creation of an authority to handle this process and empowering it with adequate resources — financial, technological, and people — is also crucial for a successful digital ID system.
- **Planning** for a digital ID system gains utmost importance due to the scale of the whole project. As part of planning, it is important for government agencies to study similar digital ID systems across the world — what they set out to achieve, their success factors & drawbacks, and how they handle risks such as data leakage. The next aspect of planning is to create a vision for the digital ID project. What does it set out to achieve, and who benefits? To answer this, it is critical to identify the stakeholders involved in the project and what their interests are.

- Another crucial aspect is to prepare a thorough **cost-benefit analysis**. Through this study, the government can identify the nature and scope of the required infrastructure. The analysis can also help locate the potential constraints and risks the project could face.
- Another critical factor is determining who is **eligible for registration**. Ideally, ID systems should provide universal access for the entire resident population and should have a user-friendly registration process that allows for quality ID proofing.

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. In line with sustainable development goals (SDG) target to provide legal ID to all by 2030, countries should make foundational ID systems accessible to all resident nationals and non-nationals. Restricting ID systems to only citizens may exclude people who are unable to prove their national status.

In India, for example, the Aadhaar system is accessible to every resident of India, defined by the Aadhaar Act as an individual who has resided in India for at least 182 days in the last 12 months. Ensuring that children have proof of their legal ID is fundamental for ensuring rights, protection, and access to services — such as schooling — and preventing child trafficking, labor, and child marriage.



2. Infrastructure

Digital ID systems have to be built on **robust IT systems** that include computing resources, hardware, applications, network and server architecture, and more. It is important to decide the correct mode of hosting this architecture as well as how applications – internal, as well as third-party ones – can access the data. Data storage services must have enough storage capacity and processing power to meet demand during the high-volume initial registration phase, peaks in demand (month-end cash transfer), and growth (in population).

Along with selecting the right IT systems, maintaining the **privacy of data** collected is one of the primary concerns of a digital ID system. In addition to adhering to international data protection and privacy principles in the development of the legal framework, privacy-enhancing technologies and security measures should be built into every aspect of the ID system.

Some important categories of these technologies and strategies of handling data privacy include **encryption, digital certificates, and PKI (Public Key Infrastructure), tokenization, tamper-proof logs, data center security, and cybersecurity programs**. Interoperability between the various systems, databases, devices, or applications that have access to data is also a crucial factor. This includes interoperability between fingerprints captured with a scanner device and the deduplication engine and interoperability between smartcards and readers.

It is also essential to lay down the credentials and **authentication mechanisms** adopted by the ID system as these dictate how people in their daily lives will use the system. Common types of physical and digital credentials include ID numbers, cards, and mobile ID. Authentication mechanisms for offline and remote account access, as well as arrangements that allow an issuing entity to accept credentials issued by third-party ID providers for authentication and authorization, should also be addressed.

The **choice of standards** is essential at each stage of the ID lifecycle. By adopting open standards for an ID system, there is a better chance that it will be able to communicate with other information systems and that the software and hardware could be changed with minimal additional costs and processes. In some cases, a closed solution may offer greater performance than an open standard. It's imperative to protect against vendor lock-in through good procurement practices and by selecting systems components that support open API standards and allow access to data in open formats.

The importance of IT systems highlights the **focus of governments on data privacy**. Modern hackers are always on the prowl for large sets of personal data to sell on the dark web, and national digital ID systems seem to be an easy target. Since these data sets also include biometric attributes, which are inherent, it is even more critical to ensure safe storage and management of these data sets.



PART 2

Impact of Digital ID on Corporates and the Growing Relevance of Digital ID Verification Tools

Introduction – Bridging the Identity Gap and the Benefits for Various Stakeholders

When we think about identification in mature countries, we take it for granted that everyone has an ID. In reality, **over 100 million people globally do not have any legally recognized form of identification**, according to the World Bank's ID4D 2018 database¹⁰.

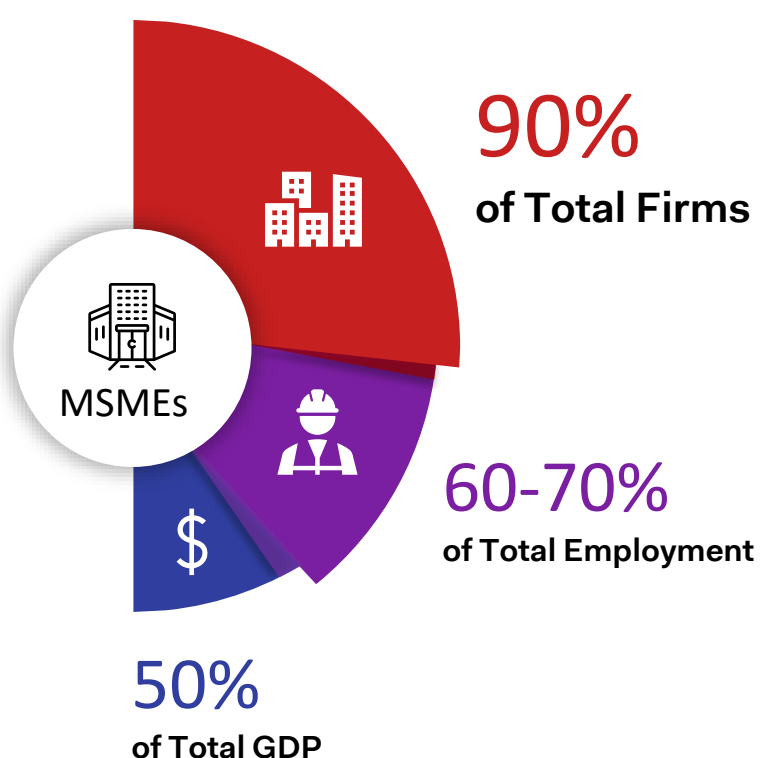
Furthermore, we believe that the remaining population who have paper-based national ID have trouble in using it effectively in this digital age. **Digital ID gives the power to validate a potential person or business remotely**. This unlocks the potential for trading or transaction between two individuals, between an individual and an organization, or between two organizations.

- **With rapidly improving technology, the declining cost of implementation, the use of smartphones, and the increase of internet penetration, implementing digital ID infrastructures should become easier and cheaper.** This should assist in creating a digital ID infrastructure that reaches more people and unlocks the value creation through economic interactions. Through an established digital ID infrastructure, people can receive better and more customized services from governments, financial services providers, and insurance companies because all their information is aligned with their ID.
- With a properly established digital ID infrastructure, it has become increasingly convenient for organizations to talk to people and other organizations easily. Through digital IDs, organizations can **increase the level of trust by validating and onboarding** their partners, vendors, customers, and employees. This process also helps organizations pass benefits such as financing options and targeted services to customers seamlessly. Furthermore, digital ID infrastructure helps large organizations operate at a higher level of accuracy and with better compliance.
- A well-built digital ID infrastructure also benefits small and medium-sized businesses. MSMEs have the opportunity **to expand and tap into the global client base** and provides rural MSMEs the opportunity to tap into distant business opportunities.
- **Digital ID infrastructures will benefit all the stakeholders** participating in the economy; however, it will take both the public as well as private organizations' cooperation to create as well as strengthen the digital ID infrastructure in any country.

How Global Markets Open for MSMEs through Digital ID

Micro/small businesses are the engines of economies, critical for moving them forward. According to the International Council for Small Business (ICSB), formal and informal MSMEs¹² account for more than **90% of all companies and, on average, 60–70% of total jobs**. MSMEs are also the lifeline to varied industries. In aviation, these smaller businesses make critical components such as seats and trolleys; in the automotive industry, they produce the majority of parts such as headlights. The MSMEs also contribute to a country's international trade and are the biggest contributors to company registrations in any economy. They represent a substantial section of opportunities, as the best MSMEs typically become pioneers in their areas of expertise. Due to the lack of digital IDs, however, this opportunity is being lost.

According to the International Council for Small Business (ICSB), formal and informal MSMEs makeup over 90% of all companies.



Before the 2008 financial crisis, most MSMEs relied on banks for their banking activities, such as establishing credit or transferring funds.

The banks created risk profiles on the MSMEs based on their past relationships. This enabled the banks to succeed financially by giving them relevant products and services. After the 2008 financial crisis, the banks reduced their risk appetite.

Most of the MSMEs lacked the basic documents needed to receive essential bank services, resulting in low access to credit and negatively impacting the global MSMEs' growth. The FinTechs that emerged during this time primarily focused on the consumer segment with front-end innovation for retail banking such as personal finance management, instant payments, wallets, recommendations, and chatbots.

As a result of the 2008 financial crisis, the gig economy grew. Large numbers of part-time, temporary, and freelance workers increased the need for small-scale business transactions and banking requirements. **The gap was now clearly visible in the MSMEs' banking landscape, but due to the lack of digital IDs,** the FinTechs relied on alternative data such as sales numbers from Amazon, eBay, and other marketplaces, or online customer reviews. However, this was insufficient to provide the credit that MSMEs required to grow. In order to expand, they needed credit, but without a digital ID, it was difficult to access.

A digital ID helps banks get more traditional information on MSMEs, creating better risk models which help in higher disbursement of money. With analytics on traditional data such as cash flow documents, collateral, and credit bureau scores, the banks can create credit scoring models that help in calculating the optimal underwriting risk involved. This leads to better rates and higher disbursement of the amount. Another benefit of having a proper credit score linked to a digital ID is the faster disbursement of cash. **When MSMEs' digital IDs are updated regularly, the linked financial history of MSMEs helps the banks to process loan applications and deliver the funds quickly.** In India, the government has introduced quick business loans that help the MSMEs to receive loans up to \$668,000 within 59 minutes.

The **MSMEs are required to be GST (Goods and Service Tax)/IT (Income Tax)-compliant** and should have a six-month bank statement. The platform using the GST and bank statement to determine eligibility based on income/revenue, repayment capacity of the borrower, existing credit facilities, and other factors set by the lender.

Before onboarding a merchant globally, the acquiring banks have to conduct a thorough KYC, which means that the merchant has to be ready with the necessary documents every time they want to use a different bank. This is a waste of time and effort for both the bank and the merchant. A digital ID saves time and simplifies the onboarding process by changing the KYC to a consent-based mechanism linked to the digital ID. This could be further enhanced by allowing **merchants to move their funds instantly from one bank to another using just their digital ID.**

Like the public sector, the private enterprise also has to do the necessary checks for verification and authentication of the MSMEs associated with them and their clients. This also includes doing a mandatory KYC check to retrieve and validate the prospective client's details. **A digital ID can help the MSMEs get onboarded quickly,** enabling them to expand their customer base, tap into new markets, and enjoy a business-friendly environment.

With the advancement of technologies, banks and businesses are concentrating on making payments as seamless as possible. **With 24x7-hour settlements of transactions, it has become easier for MSMEs to do business with their peers.** A digital ID enables businesses to quickly register on the appropriate platform and start receiving payments. The growing adoption of technologies such as IoT and blockchain will allow instant payments when parties exchange goods and services.

A Truly Global Business Requires Robust Digital ID Verification Tools

- Truly global companies or multinational corporations are those organizations **that derive 25% or more of its revenue from out-of-home-country operations.**
- The company holds a central office in one country but **has different entities or offices in other countries.**
- The **central office coordinates and manages** the other entities.
- These companies **have large physical and financial assets** and are always looking to increase their profitability.

The companies are expanding to new locations, especially developing countries, for the following reasons:

Lower production cost and increased diversification:

Companies move to new locations to benefit from an abundance of raw material that is available in developing countries. Through expansion, the companies also benefit from diversifying their assets. Diversification helps companies protect their bottom line by negating the effect of a negative growth market through a positive growth market. The diversification also enables the companies to launch new products as per the needs of the market.

Continued innovation:

Companies also look for the opportunity to attract new talent pools that could help in bringing competitive advantage through their unique skill set or diverse educational backgrounds. In the age of disruption, a unique talent also enables the companies to stay relevant through intrapreneurship.

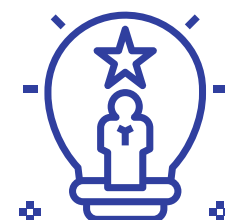
Competitive advantage and closer proximity to target markets:

When companies find new business opportunities, they expand to new locations that are close to the target market and those that have an abundance of relevant skill-sets and low transportation costs. This enables businesses to lower their cost, get easier access to consumer feedback, and reduce the manufacturing cost. Through expansion, the companies also get a competitive advantage over their peers through the first-movers advantage.

Challenges Faced by Global Businesses

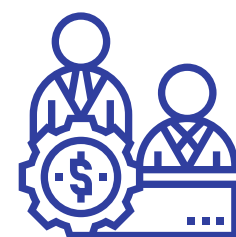
While the idea of expanding into new geographies looks lucrative to the businesses, it also comes with its own set of challenges. These challenges can be divided into three main segments:

Finding the Right Talent: Companies that expand into new geographies require the right skill-set to help them establish their successful processes and practices as well as grow in the respective region. Companies must carefully consider whom they hire, how to manage them, and how to utilize their skill-set and strengths for the overall objective. Before hiring, companies need to do the necessary background checks on potential employees so that it does not lead to an additional cost and additional effort.



Regulatory Challenges: Companies expanding into new geographies need to be aware of and prepared to comply with each country's data protection law and regulations. The FINMA regulation in Switzerland is very different from the FINTRAC regulation in Canada. Failure to meet the guidelines could result in hefty compliance fines. The regulatory environment is increasingly complex, and to navigate increasingly complex regulations, companies need to rely on outside expertise for AML checks, business verification, and KYC checks. For example, Standard Chartered was forced to pay \$1.1 billion to regulators for not having proper AML checks and breaching sanctions¹³.

Client and Vendor Challenges: When large companies expand into new geographies, they rely on new vendors to either outsource their processes or acquire raw material. By partnering with a legally compliant vendor, a large corporation can be assured that there won't be any issues resulting in damage in reputation. To capture markets in new geographies, organizations are required to acquire or partner with new clients. Thus, companies must do thorough KYC checks on these potential clients so that there is an assurance that they're conducting business with legitimate entities or people.



Choosing the Right ID Verification Partner

Organizations can address their regulatory challenges by building their own verification systems, a time-consuming and costly process. Another option is a partner with an external organization with experience navigating the rocky waters of regulations.

An ideal Identity verification partner should have the following parameters:



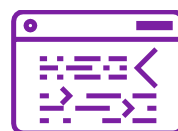
Jurisdiction: Once the business has decided its geography, it becomes essential to choose the right ID verification company that has a proven record of prior verification in the specific country.



Technology: An ID verification partner should leverage new technologies such as Optical Character Reading (OCR), Artificial Intelligence (AI), and Natural Language Processing (NLP) to help convert a cumbersome, manual documentation process into a seamless digital workflow.



Database: An ideal ID verification partner should have access to reliable, independent, and unique data sources in each market, which will help in providing a holistic analysis of businesses and individuals across the globe.



Integration: An ID verification partner should provide APIs that will help in instant verification in real time. For example, the partner could provide a widget that helps to instantaneously verify an individual or a business.

Truly Global Business Requires Robust Digital ID Verification Tools

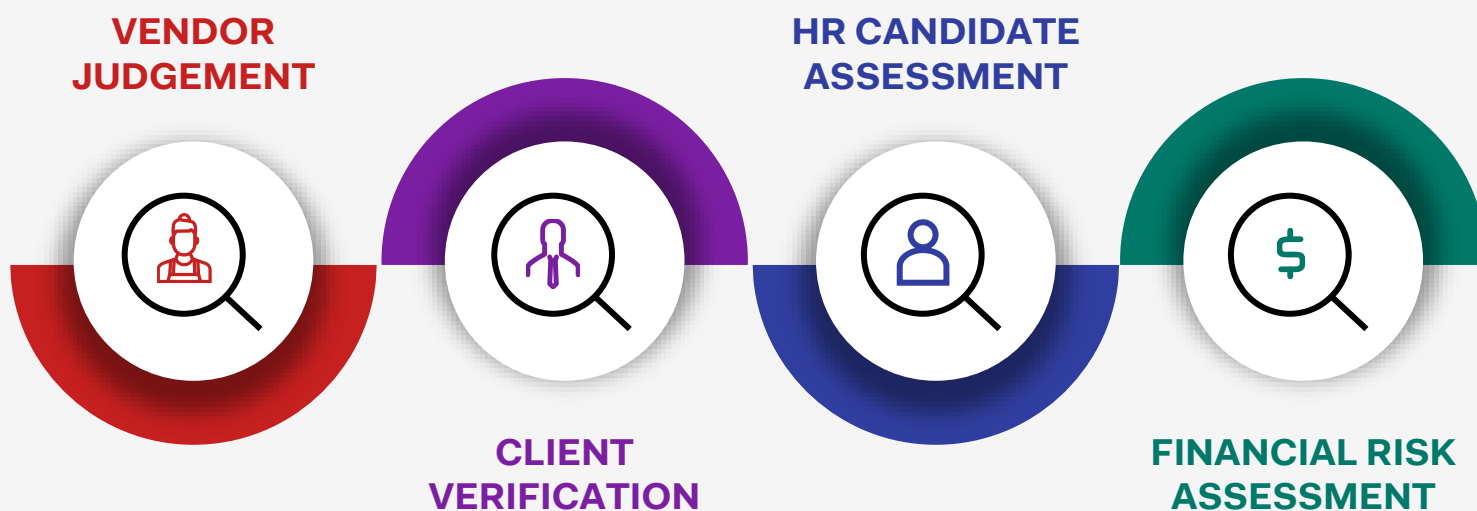
A few years ago, managing a business used to be relatively simple. Employees would be hired after reference checks and interviews, and clients and vendors would be onboarded through personal relationships. **Technology changed all that** – employees are hired remotely, and vendors and clients are based abroad. Hence, ID verification tools became vital to businesses.

The **purpose of ID verification is to ensure that the right person or business gets properly registered**. Some industries, such as financial services or gaming, require the use of verification tools to comply with anti-money laundering and know your customer regulations. Companies operating as online marketplaces or social networks use verification to ensure people do not cheat others, misinterpret information, hide information, or abuse the system.

Sensitive industries need to take extra measures to verify the entity with which they do business. In the case of pharmaceuticals, the **companies need to verify the identity of a sourcing organization** even before they do a raw materials check to be assured that they are receiving genuine products. For greater customer convenience, the pharmaceutical industry has also evolved by offering home delivery. However, underage users with past drug issues pose a major risk for online pharmaceutical companies, and it becomes important to check not only the patient's age but also their history to create safer business practices. The pharma industry also needs to **verify their employees** to ensure they have no records of creating hazardous medicine or have stolen proprietary data from other companies.

ID verification also helps businesses find new ways to engage with customers. For example, car rental companies use a simple smartphone app to allow access to the vehicle from any location or community car-sharing market. These **companies need to verify and authenticate the identities of their customers**, ensuring they're not listed in any fraud database, such as the submission of claims for stolen vehicles. This process protects the vehicles and their owners, as well as the reputation of the business. This process can be done through ID verification services to ensure that verification is fast, easy, and convenient for the user.

ID Verification in an Organization



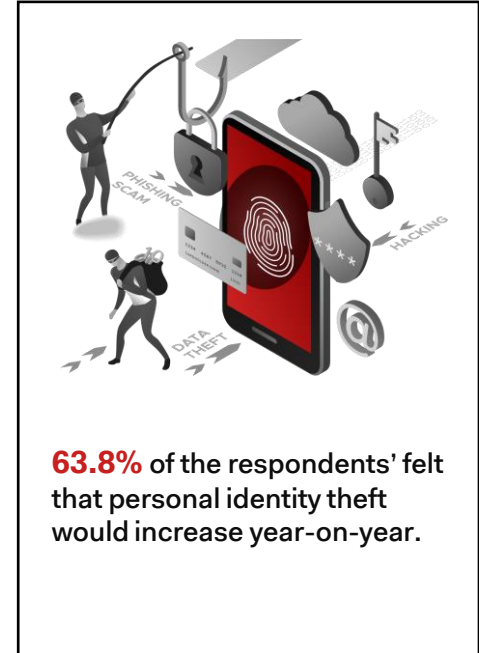
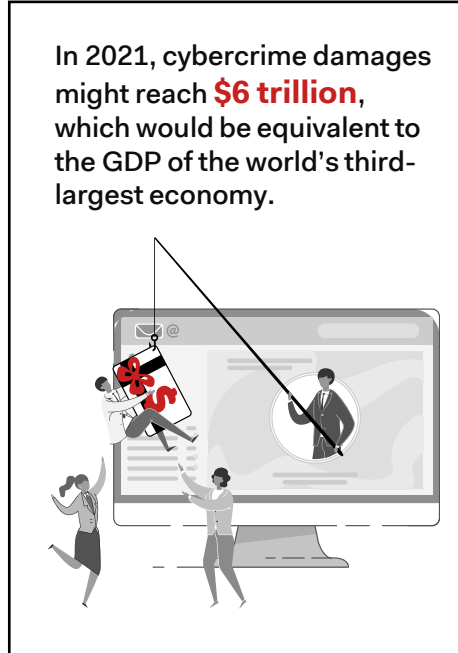
Any business with security requirements needs **ID verification in all departments that have the first touch-point with external stakeholders**. The procurement department has to vet a potential vendor and its employees. ID verification ensures a proper assessment is made before the vendor is onboarded into the company's system and given any sensitive information.

The **finance and sales departments should verify a new client's ability to pay for the services before entering into a relationship**. To verify the business entity and its owners, the finance and sales teams should collect and verify the company information against registrars and reliable data sources to conduct their due diligence.

For the human resource department, recruiting can be unpredictable. Some candidates may appear perfect on their resumes and seem to be ideal candidates to the interviewer, only to ultimately fail once they are onboarded. This happens if the candidate lies about particular skills or have a fake ID. **ID verification tools can enable the human resource department to make informed decisions in recruiting** and reduce risk every time a new person joins the organization.

ID verification is an essential component of all functions in an organization. **With proper verification tools, businesses benefit by remaining compliant** and by earning confidence from clients and customers that they are doing everything right.

Role of Digital ID Verification in Fraud Prevention



In 2021, cybercrime damages could reach **\$6 trillion**¹⁴, which would be equivalent to the GDP of Japan, the world's third-largest economy. The Global Risks Perception Survey by the World Economic Forum identified cyber-related issues, such as cyberattacks and data fraud or theft, within the list of top 10 long-term risks globally. In addition, **63.8%** of the survey respondents felt that personal ID theft would increase year-on-year¹⁵.

As mentioned earlier, ID is the center of everything we do, own, and share. Having an ID has become a necessary tool for receiving financial services across the globe. An ID plays a vital role in different stages of banking for a customer. Consumers must have **an ID to open accounts and conduct financial transactions**. The primary reason for verifying customer IDs is to fight anti-money laundering, counter-terrorism financing, as well as to ensure trust and prevent fraud. More importantly, ID verification helps businesses know the customer better, what activities they might engage in, and what kind of risk they possess to the business. In the case of commerce, ID verification becomes even more necessary to understand and mitigate such risks. A digital ID makes it easier for verification as it involves factors such as authentication of biometrics and facial recognition, which can be used to cross-verify with relevant databases.

If we consider global payments, there are large numbers of transactions that occur online in a matter of seconds. This has resulted in **an increase in cybercrime**, such as large-scale data breaches, frauds, money laundering, and scams like ID theft. For Example, the scammers have created fake online businesses that appear legitimate to any person but are incorporated only to get personal information from the public as well as sending duplicate invoices to receive higher money. Because of such cybercrimes, it has resulted in massive financial and reputational losses for all parties.

Most payment systems take pride in being fast and convenient, providing a frictionless experience to the user, whether it's creating new accounts or executing transactions. The customers who use these payment systems have access to the internet, and real-time ID verification has become easier than ever through biometrics, live videos, and photographs of physical IDs such as national IDs. **Digital ID verification can help prevent cybercrime and the loss of billions of dollars** from fraud.

Hence, using digital ID verification systems become essential for any organization as an anti-fraud tool for their respective payment systems to protect themselves from the threat of cybercrime.

CASE STUDY

Payment Processor Goes Global with Trulioo



Payment Processor Goes Global with Trulioo

To support its global expansion, a major online payment processor needed a digital identity verification provider that could scale and offer solutions in multiple markets. The payment processor had a long list of requirements. **The verification provider had to:**

- Offer both customer and business verification
- Support regulatory compliance in multiple jurisdictions
- Meet go-to-market launch dates in X countries
- Deliver a positive customer onboarding experience
- Have proper security and privacy protocols to safeguard personally identifiable information (PII)

During the RFP stage, the payment processor found several providers that met only a subset of the requirements. These providers had coverage for some markets, but not others. Or, they had one verification functionality that met some of their needs but did not offer a marketplace of identity data sources and services to enable a holistic approach to identity and business verification. Only one provider could meet all their requirements — Trulioo.

A Single API for Global Identity Verification

- As a digital company, the payment processor quickly understood the value of the Trulioo GlobalGateway [identity network](#) and the benefit of a single API to scale its identity and business verification processes globally. With only one integration, the payment processor could access all of GlobalGateway services and the 195+ markets it covers.
- As opposed to having a static solution, the holistic layered approach enabled complex customization of workflows. The payment processor created multiple workflows to automatically handle numerous scenarios for different jurisdictions, compliance requirements, use cases, risk profiles, or other variables. Having multiple workflows maximizes operational efficiencies, enabling more transactions to go through without manual assistance.
- When the payment processor started working with Trulioo, it was experiencing an incredible level of hypergrowth. The company launched the digital identity verification service in a few countries, such as the UK, France, Australia, Canada, Italy, and Singapore. Since the initial launch, the payment processor has added more countries as it continues to expand operations. Today, the company relies on GlobalGateway to verify its customers and merchants in over 30 countries.

Payment Processor Goes Global with Trulioo (cont'd)

Rising Gig Economy Merchants Fueled Demand for Business Verification

- The payment processor also uses the identity network for Global Business Verification in 26 countries to help ensure the merchants that they acquire are legitimate. The growth in the number of **SMBs and the gig economy** is creating a surge in the number of merchants, and the company wanted to ensure they could verify them quickly, while still maintaining compliance and containing fraud rates.
- Any merchant the payment processor onboards is potentially a conduit of money laundering or fraudulent and looking to abscond with funds. Strict Anti-Money Laundering (AML) laws require knowing who their customers are, along with the associated risk they pose. Failure to properly check their merchants can lead to sanctions, fines, and reputational damage. In cases of fraud, if there is no merchant, the full amount of chargebacks is the liability of the payment processor plus any additional fees or assessments associated with the chargebacks. In either case, the risk is significant, and it's imperative that merchants be vetted to mitigate risk.
- Previously, these business checks were time-consuming manual operations, so streamlining processes saved valuable time & resources and ensured greater accuracy.

Building for the future

- The flexibility and agility of the GlobalGateway identity network was a key factor in the final decision for the payment processor in choosing Trulioo. They understood that markets and technologies change fast, and they needed an approach that could leverage new opportunities as they happen. The company realizes that ongoing success depends, in part, on the ability to continually adapt and optimize their systems to take advantage of the robust global identity network.
- The payment space represents a critical **use case of identity services**. Trust is crucial: Consumers trusting their payment information with the clients of the payment processor and, in turn, these clients need to trust the payment processor. With secure and scalable global identity verification services, Trulioo helps the payment processor deliver a seamless digital account onboarding experience that fuels international expansion.

Conclusion

The digital ID has gained significant importance in the dynamic online world. It enables an individual to access financial benefits and other government services offered by the country. Through a digital ID, an individual can access the financial services that are required for their growth, and this individual growth helps countries grow and prosper. A digital ID also enables an individual to increase their lifestyle quotient by accessing multiple products and services from different vendors. By proving their ID, an individual can choose among various options that the world of e-commerce provides.

While a digital ID offers the advantages of remote verification for individuals across the globe, it also raises concerns such as individual privacy and surveillance. It is very important for nations to address these concerns before implementing a digital ID system. Countries should also invest in state-of-the-art security measures to store a large amount of data, including personal biometric data.

With the advent of digital ID, businesses can more easily onboard new customers and partners. Through access to digital ID information, they are also able to offer personalized services to their customers, which enhances the overall customer experience. Digital ID has enabled businesses to globalize quickly. Using

digital ID verification, a business can expand to new markets, increase their employee strength, and get new customers as well as lower the production cost of their products and services. However, businesses have to understand that they are also the custodians of this data. With increasing cybercrime rates, it has become imperative for businesses to invest in secure storage of personal data. Businesses also need to ensure that they invest in the right verification tools to help stay safe from cyber-crimes that are associated with a digital ID.

Digital ID verification solutions have made it easier for enterprises to enter partnerships and transact with new businesses around the globe. Enterprises should spend time and effort when considering a global ID verification partner. This partner should be able to access global databases to verify individuals and businesses across the world instantly. Global businesses can hedge multiple risks through careful utilization of efficient verification solution. It is only a matter of time before digital ID verification becomes one of the essential tenets of running a global, successful business.

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Thank You



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