



Technology and online beneficial ownership registries: easier to create companies *and* better at preventing financial crimes

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Abstract

The Panama Papers showed that financial crimes such as money laundering, corruption or tax evasion are alive and kicking. They flourish thanks to secrecy that allows criminals to hide behind opaque companies and trusts. For example, some countries allow bearer shares or they do not require *all* types of entities to register in a commercial register for them to legally exist. Or, even if all entities have to register, not all types of shareholders and members have to be disclosed. This means that entities may operate in the economy (e.g. opening a bank account) even if their full ownership information is not available in a commercial register.

In most countries, however, most legal entities (e.g. companies, but not trusts) *do* have to register in a commercial register. Nevertheless, they generally only have to disclose their legal owners (e.g. a nominee or an offshore company), but not their beneficial owners (BOs), meaning the individual ultimately owning or controlling the entity. The process to incorporate an entity is usually done in person and on paper at the commercial register.

Two current - but opposing - trends are changing this.

The negative trend is that commercial registries are moving online, making it easier and faster to create companies remotely via the internet, where very little legal ownership information is required, if any. This increases secrecy levels around companies and facilitates financial crimes even further.

The positive - but still insufficient - trend is that some countries, especially in Europe, are starting to "upgrade" their commercial registries to require legal entities (and some trusts) to also register their BOs. However, this positive trend is not good

enough because it is still simple to provide false or inaccurate BO information when registering the entity.

Civil society organisations are therefore calling for a more effective combination of both trends: in other words, to upgrade all commercial registries so that they do require BO information of companies and trusts, *and* to have this information digital and in open data format to make it easier to search for it and check its accuracy and truthfulness.

In order to reduce the options for those who would want to provide false or inaccurate BO information, this paper proposes that the same technology already available and deployed in the private sector (e.g. cross-checking, big data and artificial intelligence used by credit card companies to prevent fraudulent online purchases) should also be used in these digital commercial registries.

In addition, access to this BO information must be public and in open data format, in order to create a deterrent effect. Even once this technology is applied, if access to digitalised BO information is restricted to authorities, it is less likely to ensure the accuracy of the information since neither civil society nor journalists can use their resources to check the information.

We have to consider the possibility that authorities may also be corrupt and choose to protect businesspeople or politicians and no one would ever find out about it, unless another leak like the Panama Papers takes place.

It makes good sense that public BO online registers should apply the technology mentioned above. Restricted online registers, and those that require disclosure of legal ownership only, if any ownership at all, should be prevented.

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1. Introduction

Financial crimes such as money laundering, corruption or tax evasion rely on exploiting anonymous companies and trusts to hide the identity of criminals and the real nature of financial transactions (e.g. conceal a bribe as a payment for services). Both international organisations (the G20, OECD, FATF, Global Forum) and civil society agree¹ that ownership information of all entities should be available at the beneficial ownership (BO) level. That means identifying the individuals ultimately owning or controlling the entity –knowing only the “legal owner” of an entity (e.g. another offshore company or a nominee) is of little use.

Civil society organisations are calling for current commercial registers to upgrade into central online registries of beneficial ownership for all types of entities, available online and in open data format accessible by the general public². Opponents, however, have claimed, among other issues, that BO registries will be of little use, because entities will simply lie when declaring who their BOs are³. They think that *only* institutions such as banks, obliged to perform “know your client” provisions (to prevent money laundering) have the right incentives to ensure the accuracy of information declared by a customer, for example when opening a bank account.

This claim makes very little sense. First, no one is proposing to eliminate current anti-money laundering (AML) provisions already performed by banks and other institutions obliged to carry out those checks. Public online BO registries would *complement*, not *replace*, financial institutions’ AML requirements.

Second, transactions could take place without banks, e.g. a cash payment for a service or even to purchase real estate (for example, in countries like Argentina real estate transactions often take place as cash-only transactions). While notaries and real estate brokers are supposed to perform those same AML provisions, they are not as well supervised as banks, and so enforcement is much more difficult. In other words, we cannot simply trust banks to collect this information, but we should still take advantage in cases where they do.

¹ They disagree on who should hold this BO information and who should have access to it. International organisations require only law enforcement to have access to the information, and believe that the entity may hold on to the BO information as long as authorities may ask for it. Civil society, in contrast, ask for BO data to be held by an official institution, e.g. a commercial register (so that authorities do not *need* to ask for it and risk not getting it) and for it to be publicly available (not restricted to authorities).

² We have written about the ideal legal framework for BO registration of [companies](#) and [trusts](#), and [everything that a BO registry should have](#).

³ The same could be said about current registries where only legal ownership is declared (although no one would have an incentive to lie about their legal owner. First, lying about the legal owner involves a risk (losing dividend or voting rights). Second, it makes little sense because when declaring a legal owner (e.g. a nominee or offshore company), the beneficial owner (the individual ultimately owning or controlling the entity) will still remain unidentified.

This brief will try to show how current technological advancements, already used by the private sector, could equally be applied to ensure the accuracy of the BO information declared in an (upgraded) commercial register. The use of this information, however, requires that BO information be digitalised. To put it bluntly, suppose you need to check whether "John Smith" owns a company in country A. If all the information is digitalised (e.g. in an Excel document), you could simply hit "control + find" and check if "John Smith" appears in any entry. If the register is only on paper, checking for that same question would involve someone reading thousands or millions of files.

Many commercial registers still only use paper. At the most, documents are scanned (this makes it easier to access it online, but not to search for a name if the document looks like a photo rather than a text – it would involve going over every photo, just as if it were on paper). However, with almost all transactions happening online, and in order to promote entrepreneurship (and higher ratings in the World Bank's "doing business" report) some countries are moving their commercial registries online, allowing entities, e.g. companies, to be incorporated remotely via the internet. Worryingly, these registers hardly ever require BO information to be registered (sometimes not even legal ownership), making it even easier for criminals to hide behind entities to commit financial crimes.

Digitalising corporate registers improves the fight against financial crimes *only* if BOs have to be registered, access is public and the right technology is applied. Otherwise, financial crimes are actually facilitated.

Summary

Table 1: what is registered and how

Closest example	Creation of entities (e.g. companies, trusts, etc.) ⁴	Who has to be registered as the owner?	Is technology applied to ensure accuracy of information?	Risk of being abused to commit financial crimes
Most commercial registries	On paper (and in person)	Only Legal Owner (a nominee, an offshore entity)	Not Applicable (it's all paper)	High risk (the BO remains unknown, it is not easy to search for information & documents may be lost or burnt because they are not even scanned), although not so easy to create an entity remotely
Argentina ⁵ (for some companies)	On paper (and in person)	Legal Owner & Beneficial Owner	Not Applicable (it's all paper)	Mid-high risk (BO information will be available but it may be false or inaccurate, it is not easy to search for information & documents may be lost or burnt because they are not even scanned), although not so easy to create an entity remotely
Current trend, for example in some U.S. States (in others, e.g. Delaware, the situation is much worse because not even legal ownership is registered)	Fully digital & online	Only Legal Owner (a nominee, an offshore entity)	No	Extremely High Risk (the BO remains unknown & easy to create entity remotely from abroad).
The UK	Fully digital & online	Legal Owner & Beneficial Owner	No	Lower risk (while BO information will be available, it may be false ⁶ or inaccurate), but easier to create remotely
(No country yet)	Fully digital & online	Legal Owner & Beneficial Owner	Yes	Low risk (BO information is available and it is harder to provide false or inaccurate information, even if BOs are foreigners creating the entity remotely)

⁴ This assumes that all entities have to be registered in order to legally exist. Otherwise, the risk is even larger because not even legal ownership information may be available. The same risk would apply if not all types of shareholders or partners or members have to register, or if the threshold to be considered a BO is too high (e.g. [more than 25%](#)) making it easy to avoid being identified as a BO.

⁵ See Resolution [IGJ 7/2015, art. 518](#).

⁶ The UK does impose fines and jail time in case someone provides false information, but this would only be detected, at best, after the company was created, not before.

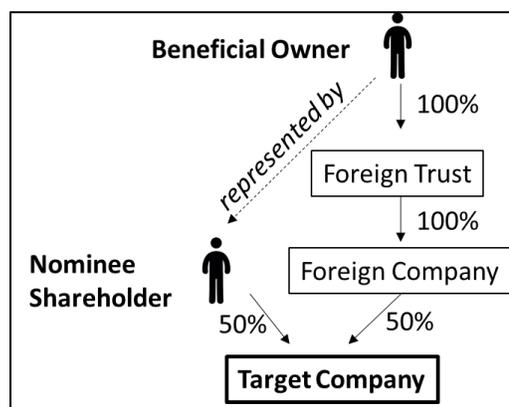
Table 2: who has access

Only authorities (or requiring a “legitimate interest” or to pay a fee)	Public Access (digitalized and in open data format)
Deterrent effect is less powerful; authorities may lack staff, time or resources to check the information, and/or authorities may be subject to corruption to protect some businessmen or politicians	Civil society, journalists, shareholders or investors may check the information, creating a deterrent effect.

2. Beneficial Ownership Registries

What is a beneficial owner?

Beneficial owners (BOs) are the natural persons who ultimately (and actually) own, control or benefit from a company, trust or any other type of legal entity or arrangement, regardless of the nominee shareholders or layers of intermediary entities appearing as the direct owners. Upgrading current commercial registries into public registries of beneficial ownership (BO) of companies, trusts and any other type of entity or structure are thus the solution to individuals that hide behind opaque, unregistered or anonymous legal structures in order to commit crimes such as money laundering, tax evasion or other corruption offences without being discovered.



A tool to catch criminals

A company or trust may be abused in order to commit a crime, for example if it is used to hold a bank account with undeclared funds of illegal origin or if it is used to simulate commercial transactions to launder money. Since companies cannot go to jail, authorities need to catch the individual controlling such entities.

Once authorities discover that a legal structure was involved in a crime, public BO registries provide useful clues, if not the direct answer, about who may be responsible for the crime. In contrast, most existing registries in countries have no information at the BO level, but merely at the “legal ownership” level. This means that after authorities discover a company involved in a crime, they will only be able to find out the name of the foreign company or nominee appearing as shareholders, and it may be very difficult or impossible to know who the BO is.

However, could BO registries also *prevent* illegal activities?

Crime prevention and BO registries

BO registries *themselves* cannot prevent any crime from being committed with a legal structure (e.g. a company or trust). What they can and *should* do, however, is to ensure that the person named as a BO is accurate and correct, so that whenever a legal entity is found to be involved in a crime, authorities already have key information on who may be responsible or where to start investigating.

Any person may create an entity such as a company if they comply with legal requirements, if any (e.g. have a national ID, not to be subject to bankruptcy procedures, etc.) and with the red tape to create such an entity, if any (e.g. writing a company statute, providing required minimum capital, having it notarised, etc.). There is generally no need to be wealthy, professional or even a national of that country to create a company. But if anyone may create a company, how can financial crimes be prevented?

BO registries can help in preventing other financial crimes or unethical actions. For example, if a company wants to bid for a government contract, the State agency in charge should ensure that no BO of that company has a conflict of interest. For example, a company should not gain a government contract if the approving agent or the Minister is also a BO of the company. This does not mean that that person should not be allowed to create or own *any* company. It simply means that the State agency should not allow *that* company to obtain the contract because there is a clear conflict of interest. In other words, the BO registry has to guarantee the accuracy of the BO's identity to allow the State agency to find out whether there is a conflict of interest and in such cases, prevent that company from gaining the contract.

Fideicomisos (trusts) are usually used to build apartment buildings in Argentina. Anyone should be able to create a trust, but the authorities issuing building permits (not the BO registry) could check whether the trustee (who will be potentially liable in case there are any damages or tort/civil actions during the construction process) is actually solvent. Otherwise, victims of an accident, negligence or any voluntary creditor (e.g. a supplier) will be left empty handed when they try to recover their damages. The State agency could check the solvency of the trustee based on their banking records, tax records, etc. and thus prevent a common situation where the trustee is actually a person living in a *favela* with no assets under their name, no banking records or tax returns.

Similarly, any person should be allowed to be a beneficiary of such a trust involved in construction. However, authorities e.g. tax authorities, should check whether an investor-beneficiary investing in the construction trust (in order to obtain an apartment in the future), can actually justify the legal origin of the funds used to invest in the building. This due diligence check could also be carried out by the notary or the real estate broker or the real estate registry whenever a trust or a company tries to register their ownership of real estate.

Banks and other persons or institutions subject to anti-money laundering regulations (AML) could also benefit from using commercial registries upgraded into BO registries – in addition to accounting information – for their due diligence procedures to ensure that their clients can actually justify the origin of their funds. Again, it is not the BO register that would prevent a company from opening a bank account. That is the job of the bank. The BO register provides key information about the persons behind (owning) such a company, so that the bank can perform its know-your-client procedures better.

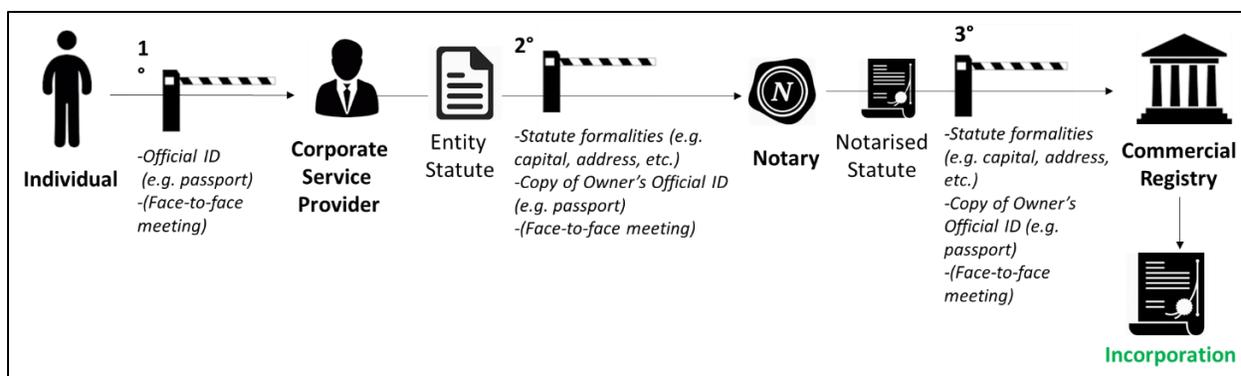
3. Getting it right: authentication, authorisation, validity of information and red flags.

Corporate registries make magic happen. They allow an individual that exists (someone who was born, has a name, an address, etc.) to create something that does not exist in nature: a company or another type of legal entity. Many legal systems actually call these entities a “legal fiction”. This is because an entity such as a company that exists only on paper will now be treated as a person in that it will have rights and obligations, such as the right to hold a bank account, own real estate or have an obligation to pay taxes.

Corporate registries therefore need to ensure that the person creating a company is who they say they are (authentication), that they are authorised to create a company (they meet all legal requirements or have a power of attorney to do it on behalf of someone else), and to check that the documentary evidence (e.g. copy of a passport) is valid and legitimate. The corporate registry should check whether something looks odd or illegitimate, for instance if the purpose of the company is for involvement in terrorism or drug smuggling.

3.1 Present: Paper-based corporate registries

Requiring current corporate registers to “upgrade” by requiring registration of beneficial ownership information is not enough to ensure the accuracy of such information – although it is still better than requiring only legal ownership information, which means identifying only a nominee or offshore company as the shareholder. As the figure below shows, for current paper-based processes of incorporation the authentication, authorisation, validation of information and red-flagging is done all at once – *if done at all* - and in person, when the registry’s staff (or the corporate service provider or a notary, if applicable) checks the identities of the founders of a company, checks that all papers and forms are complete, that authorisation, if any is required, e.g. for the corporate service provider to incorporate on behalf of someone else is fine. Red-flagging, if it happens at all, would usually be based on a person’s personal opinion, interest and common sense.



This process, involving people and paper, may take several days or weeks. The World Bank, for instance, rates countries on how easy it is to do business there, and verifies how long (and how much it costs) to incorporate a company there. A very long and complicated process to create a company could discourage businessmen, entrepreneurs and also criminals from using such a registry (or country). However, the more paper and staff are involved in the process, the higher the potential for corruption⁷ to make sure that the company is created either faster, or with lesser checks.

A paper-based registry, on top of everything else, could be especially useful when a criminal is hoping that any information will be hard to find after some time, if any investigation cares to check, or to actually “make sure” that the file is “lost⁸” or burned in a fire⁹.

3.2 The future: fully-digital 24-hour corporate registries

In response to the World Bank’s ‘doing business ratings’, to business people’s demand for simplicity, or simply to promote a jurisdiction in order to increase revenue coming from registration fees and create a bit of work for corporate service providers (lawyers, notaries, etc.), countries are trying to facilitate the creation of companies that is all too often a race to the bottom. This is happening among States in the U.S. and in other tax havens, offering less regulation, less paperwork and more online/fully digital processes.

Facilitating legal entities to be incorporated online and remotely involves a huge risk, if only legal ownership is required to be registered (sometimes not even that is required). Fully online and digital processes mean that people in far-away countries will create entities providing less, or fake, information. Or that someone pretends to

⁷ See for example “Does over-regulation lead to corruption?” available here: <http://www.aabri.com/LV2014Manuscripts/LV14025.pdf>; 16.5.2017.

⁸ See for example a corruption case involving a Vice-President of Argentina, where the commercial registry lost the file: <http://www.lanacion.com.ar/1737080-desde-el-gobierno-aseguran-que-es-normal-que-se-pierdan-expedientes-como-el-de-ciccione>; 16.5.2017.

⁹ Suspected arson in an Argentinian Court involved in corruption cases: https://www.clarin.com/politica/viedmario-negro-justicia-incendio-alberto-weretilneck_0_SyNxSrYPmx.html; 15.5.2017.

be someone else in order to commit fraud (like when someone uses someone else's credit card for their own benefit) or any other illegal activity. After all, if hackers are able to steal and affect companies and institutions in several countries¹⁰, how hard can it be to hire one to create a company, when many registries or corporate service providers do not even bother to check the information or have any red-flag system¹¹. Financial crimes will be facilitated even more.

But digitalisation is not a bad thing, as long as BO information has to be registered for all companies and trusts. In that case, digitalisation enables current technologies to be applied to ensure the accuracy of the information, as the next section explains.

3.3 How it should work, under a fully digital system

Authentication. Even if a process is fully digital, scanned copies of passports or national IDs should still be required, to make sure that the person trying to create a company is who they say they are. Otherwise one could create a company using the name of a public figure, use that company to commit crime, and then have that person incriminated. (In the near future, digital signatures or other means of digital certification may eliminate the need for passport copies for authentication purposes.)

At the very least, signed declarations confirming the validity of all submitted information should be required to prove "intent" to provide false information, in case criminal proceedings are applicable.

Authorisation. When a corporate service provider is creating a company on someone's behalf in particular, we need to make sure that the BO actually authorised this. Corporate registries may require scanned copies of powers of attorneys or other means of authorisation, but we should consider increasing the steps to "validate" an authorisation by contacting the person themselves to confirm their authorisation at any official registered email or cell phone they have, or with a token or "passcode card" like those used for home-banking operations.

After all, if banks require a token or for clients to enter specific numbers from a "passcodes card" to allow a bank transfer, or if Google bothers to send an SMS to confirm that you are the person logging on to your email account from a different computer, why shouldn't we do the same when a (legal) person, with rights and obligations is being created, supposedly on someone else's behalf?

Of course this two-step validation needs to make sure that at least one contact detail is accurate (both an email and a cell phone may be from an impostor) and that communications are secure and not easy to hack. The point here is not about cyber security, which goes beyond the author's knowledge, but just to point out that

¹⁰ The most recent case, the 'WannaCry' ransom hacker attack of 14.5.2017: <http://money.cnn.com/2017/05/14/technology/ransomware-attack-threat-escalating/>; 16.5.2017.

¹¹ See the 2012 paper "Global Shell Games: Testing Money Launderers' and Terrorist Financiers' Access to Shell Companies" available here: https://www.griffith.edu.au/_data/assets/pdf_file/0008/454625/Oct2012-Global-Shell-Games.Media-Summary.10Oct12.pdf; 16.5.2017.

methods applied to validate for home banking and email transactions, could also be used for commercial registry operations.

Validity of information. Verifying whether passport looks valid may be easier when looking at it in person. But sending a scanned copy of a passport is hardly enough to determine its validity and accuracy, knowing how sophisticated graphic edition software already is.

At the very least, information should be cross-checked for consistency with other official databases. If someone - as required by incorporation forms - declares a name, address, national ID, Tax Identification number (TIN) and birth date, corporate registries if digitalised, could easily cross-check information with databases of other registries.

For instance, civil registries for the name, address and ID of people; tax registries for a person's tax return information; the central bank for a person's bank account details; immigration agencies for residence; whether a person is in the country or not; real estate registries for a person's real estate holdings, etc. It would then be possible to confirm whether someone with that name actually lives at that address, was born on that date (and is still alive) and has *that* TIN and passport number.

Again, this is already the norm in other fields. Any customer service of a bank or credit card will ask some security questions even if you provided the right credit card number and security code. Why are these checks available to prevent fraudulent purchases and transfers, but not to create legal entities and structures that can do so much more than money transfers?

Until automatic cross-checking for consistency takes place, online registries should at least have data validation provisions. For instance, the nationality should be chosen from a list of options

What happens if the BO of a company in Country A is a foreigner (from Country B), so Country A's databases have no information on him/her? Should authorities from Country A not check for data-consistency in that case? Or should Country A demand to access all of Country B's databases?

The authorised personnel of a commercial registry should be able to run a query (not to access the full data) against a foreign country's database. For example, if a German individual tries to register as the BO of an Argentinian company, the Argentinian BO registry could automatically "ask" (technically "query") the German database whether this individual with that name, address, passport number, etc. who claims to be a German resident actually exists and whether all the information is correct (i.e. is consistent with German records). The Argentinian BO registry would only get a confirmation whether the information matches or not (without getting the correct information, if the information does *not* match). If the information does not match, it will not allow that individual to register as a BO until the information is rectified and a matching confirmation is received (to prove that the information is at least, consistent). Maybe the system could also warn whether a person was red-flagged or is related to other risks, e.g. being a PEP in the foreign country.

instead of allowing the user to write freely, describing it themselves¹². Number-entries, either TINs, national IDs or Zip Codes should also have plausible number validation, instead of allowing 'free-text' (any online purchasing site like Amazon already requires this too).

Red-flagging. While digitalisation can be used to easily and automatically cross-check information against other databases (for consistency purposes), technology - especially big data and artificial intelligence - should be used to create profiles of beneficial owners and red flag suspicious cases (e.g. this person trying to create a company is "dead" according to the civil registry of death certificates), even if not manifestly illegal. Open data and artificial intelligence for profiling would be required for real cases where the illegality or wrongness would not be as obvious. For instance, a real person appearing as the owner of a company involved in a government contract could provide their real identity information (name, address, TIN, etc.) and also their real passport or national ID, so all the previous checks would look fine (they would all be consistent with official databases).

Updating information: how to ensure registration of transfers of shares?

Whenever someone transfers shares, it is important to register the change of ownership. There are different ways to promote this (which hardly ever happens). The basic one is to impose penalties for failing to do so. Additional incentives would be to invalidate any decision or vote by any (new shareholder), unless their new ownership was properly registered. An extra incentive for the new owner would be that the old owner would still be allowed to vote or get dividends, as if the transfer hadn't taken place. An incentive for the old owner would be to subject them to the same liability, e.g. unlimited, unless the transfer of shares is registered. If registers are fully digitilised, it is easier to detect companies that fail to provide an annual return with the updated list of owners, and such a company could automatically be prevented from engaging in any commercial transaction until it updates the register. For the future however, better technologies including the **block-chain** technology could be used. If it works to make sure who the new and old owners of each bitcoin is, why not do the same to ensure who the new and old owners of each share of each company are?

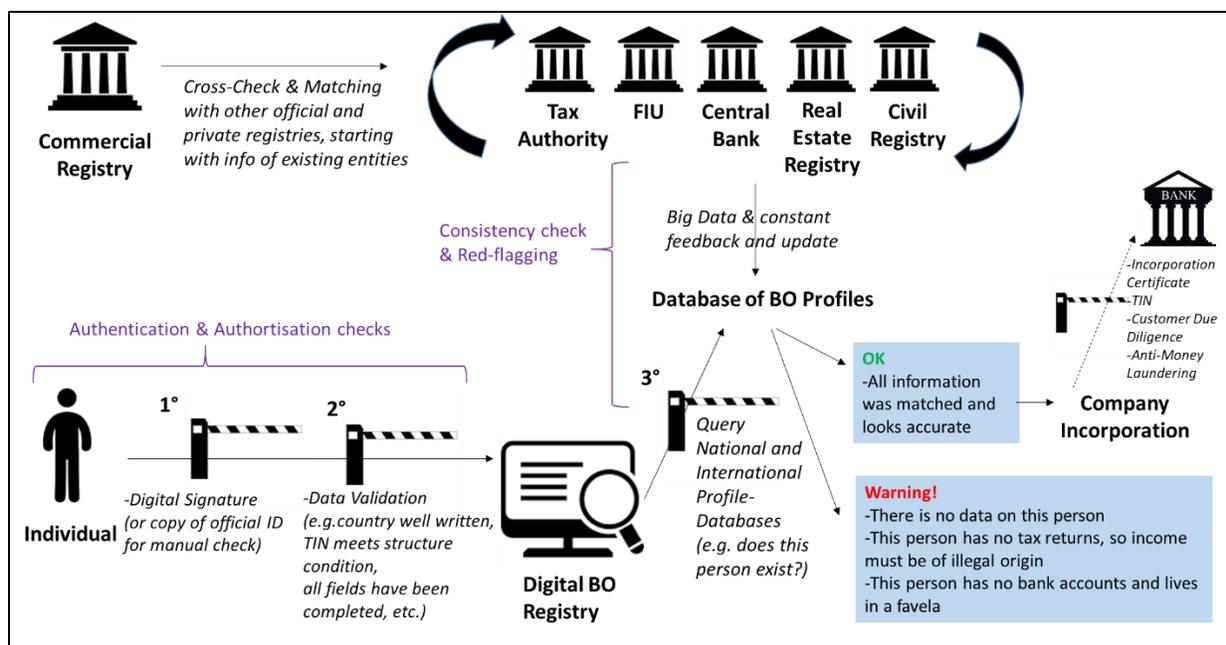
But what if this person is poor (living in a favela), without any bank account or declared income? They would still be allowed to create a company, and all the information they provided could be accurate and consistent. But the problem is that it looks rather suspicious that such a person, with those characteristics, would be the owner of a big company involved in a government contract. That is precisely what happened for instance in Argentina, when a poor and retired man was given \$200 to sign documents and appear as the representative with power of attorney over the

¹² When analysing the UK BO online register, the organisation Global Witness found over 500 ways of writing the nationality "British". See: <https://www.globalwitness.org/en/blog/what-does-uk-beneficial-ownership-data-show-us/>; 16.5.2017.

company involved with a government contract for printing the national currency¹³. Redflags would not automatically prevent someone from creating a company, they simply signal to the registry that more checks or investigations should be made before allowing the incorporation.

Such a sophisticated registry could do even more. It could check whether this person appearing as the BO of a company is a politically exposed person (PEP), or related to one, and where they work. This way, a red flag could be created, not for the purpose of preventing this person or this company from opening a bank account or from bidding for government contracts, but to warn and alert banks and State agencies of possible risks.

Technology would also prevent a person who died to be named as a BO, or to remain as a BO. Equally, technology can tell us if this person is prevented from engaging in business (e.g. if they are on a blacklist or sanctions list). Just as credit cards block transactions whenever an unusual purchase is attempted in a different country from the card holder's residence, so could BO registries and other registries be combined to determine whether a person exists, whether their information on their identity is accurate and whether there is any risk with them.



While technology would allow companies to be created within hours, as currently happens in some tax havens, cross-checking for consistency and profiling created by big data or artificial intelligence could at least prevent companies with the wrong data, or the wrong person, from being created in the first place.

¹³ <http://www.lanacion.com.ar/1447857-jubilado-sin-plata-y-controla-ciccone>; 1.5.2017.

And, being digital, it couldn't simply be lost¹⁴ or burned in a fire.

4. Is this science-fiction?

No, science-fiction (or rather a horror movie) is to realise that the technology already exists but commercial registers are hardly taking advantage of it. Where does that leave the fight against corruption? The UK already has a fully digital BO register¹⁵ for companies which is free, online and in open data format.

Many countries cross-check information. For instance, Argentina has [Sintys](#), a federal system to cross-check tax and pension information (originally created with a World Bank loan to detect fraud by making sure that recipients of social pensions actually needed them). It allows a public officer to validate a person's ID, and detect whether they are recipients of retirement, education or social pensions, whether they hold real estate, have interests in companies, employment – or unemployment insurance – and any additional address¹⁶. Argentina's tax authorities not only have access to that, but also to banking records, credit card consumptions, and data from students at private schools, among other information¹⁷.

As for even more sophisticated features based on Big Data: credit cards use big data to detect fraud, Netflix can suggest targeted movies, Amazon does the same with books, Facebook is developing tools¹⁸ to prevent "false news" and "false amplification" (fake users and coordinated massive 'comments', 'likes' and 'shares') and Israel¹⁹ checks social media in order to identify potential terrorists. All this, and yet meanwhile the creation of 'legal fictions' (companies) that are involved in all of these technologies, is still mainly done on paper.

5. How about the cost?

This paper does not focus on costs. However, as a reference point, Argentina received a USD 20 million loan from the World Bank to develop the Sintys system. However, once the system is in place, either that one or whatever cross-check tax authorities already do, it could easily be shared with commercial registries (as well as other State agencies fighting financial crimes).

If developed countries and multinational companies have already developed this technology or digital platforms, they could easily share it with other countries, either as foreign aid or corporate social responsibility. To put things into perspective though, the start-up [Avant](#) providing online loans based on "big data and advanced machine-

¹⁴https://www.clarin.com/politica/Caso_Ciccone-Julio_Alak-expediente-The_Old_Fund-legajo-Inspeccion_General_de_Justicia-excusa_0_S1kjZYdqDQe.html; 1.5.2017.

¹⁵ <https://beta.companieshouse.gov.uk/>; 16.5.2017.

¹⁶ See Sintys' user manual: <https://www.sintys.gob.ar/descargas/ManualVIAS.pdf>; 15.5.2017.

¹⁷ <http://www.iprofesional.com/notas/128799-Sabe-cunta-informacin-tiene-la-AFIP-de-usted-y-cmo-puede-utilizarla-para-inspeccionarlo>; 16.5.2017.

¹⁸ <https://fbnewsroomus.files.wordpress.com/2017/04/facebook-and-information-operations-v1.pdf>; 15.5.2017.

¹⁹ <https://www.algemeiner.com/2016/08/07/israels-latest-weapon-against-lone-terrorists-big-data-analytics/>; 15.5.2017.

learning algorithms” (with a current loan portfolio of USD 3.5 billion) was set up in 2012 with only USD 1 million.

Even if having digital online BO registries that apply data validation, big data and artificial intelligence isn’t necessarily cheap at first sight, isn’t it worth it? **Otherwise, how serious is the fight against corruption, tax evasion and money laundering?** This isn’t only a philosophical question, but one that points at the costs and resources that would be saved if effective BO registries facilitated prevention. The best example where this does *not* happen is in the case of the U.S., where not even legal ownership is collected, while limited liability companies may be created online. The Financial Action Task Force (FATF) in its 2016 Mutual Evaluation²⁰ described the following (page 159):

*The authorities provided case examples demonstrating that LEAs [Law Enforcement Agencies] are able to obtain adequate and accurate information about the BO of some legal persons/arrangements created in the U.S., **however there was no information available on the actual lengths of time it took the authorities to identify the BO** where that was key to the success of the cases. LEAs advised the assessors that they must often resort to gathering this information through **time-consuming, resource-intensive, and lengthy investigations, which may involve: detailed analysis of bank accounts and transaction records; physical around-the-clock surveillance; collection of emails; conducting searches; interviewing potential witnesses, etc.** As a result, the competent authorities are not always able to access such information in a timely manner, and thus it cannot be said that there are no impediments to their collection of such information. **The requirement to launch a full and costly investigation cannot be construed as an effective mechanism for timely access to adequate, accurate and current BO information.** LEAs indicated that reforms that would give them easier access to IRS information on BO would be welcome from their perspective.” (emphasis added).*

6. A company already exists. Now what?

Even under the ideal corporate registry with cutting-edge technology, we cannot trust that mistakes will not be made. Even if the system is flawless, a corrupt official can always turn a blind eye to a red flag and allow a company to incorporate. Therefore, even then, we would need BO registries to be **public** so that there is an extra set of eyes, especially those of journalists, civil society and minority shareholders. For example, Argentina has official audit agencies, as most countries do. Still, it was only after the Senate’s accounting data became public – and journalists and volunteers

²⁰ <http://www.fatf-gafi.org/media/fatf/documents/reports/mer4/MER-United-States-2016.pdf>; 15.5.2017.

looked at them, that odd and apparently illegal expenses were discovered²¹. Similarly, a corruption scandal involving transportation companies and Argentine authorities was discovered by journalists after Argentina publicly released information (in open data) about transportation: companies were obtaining subsidies based on their self-declarations on the number of kilometres their buses had driven. However, after comparing that data with that of all users' *actual* commutes, it was clear that companies were overstating their services and costs²².

However hard it may be to find wrong-doers, the mere "public" feature of the registry works as a **deterrent effect**, knowing that your incriminating evidence will be out there, just waiting to be discovered.

The United Kingdom is the first country to have a public BO registry for companies in open data format, where sanctions for filing false information include jail time. Still, [Global Witness, OpenCorporates and others](#)²³ were able to discover that 3,000²⁴ companies had filed inaccurate information to the UK beneficial ownership registry (they named "entities" as beneficial owners, even though the latter must always be a natural person) or that individuals appearing as owners of UK companies had the same names as individuals under the U.S. sanctions list²⁵.

Imagine how much more than this is needed in other countries where not even beneficial ownership is required, or where hardly any data is online, let alone public.

Up until now, the only thing preventing criminals from using disorganised and weak paper-based corporate registries is that it may take too much time to create a company, a time a criminal may not want to wait. But with countries engaged in a race to the bottom to accelerate and simplify process it will entice criminals (even if countries "meant well" in trying to attract business, like Argentina's new law for entrepreneurs to create companies with bank accounts within 24 hours²⁶), public registries become even more of a necessity.

²¹ For example, the former Vice-President took 4 bodyguards and 7 assistants in a 6-day trip to participate in a one-day conference in Switzerland, spending more than USD 100.000. In another case, the former Vice-President directly bought luxury furniture without a public tender (even though their price doubled the threshold up to which direct purchases are allowed without public tender): <http://blogs.lanacion.com.ar/data/argentina/gastos-del-senado-2004-2013/>

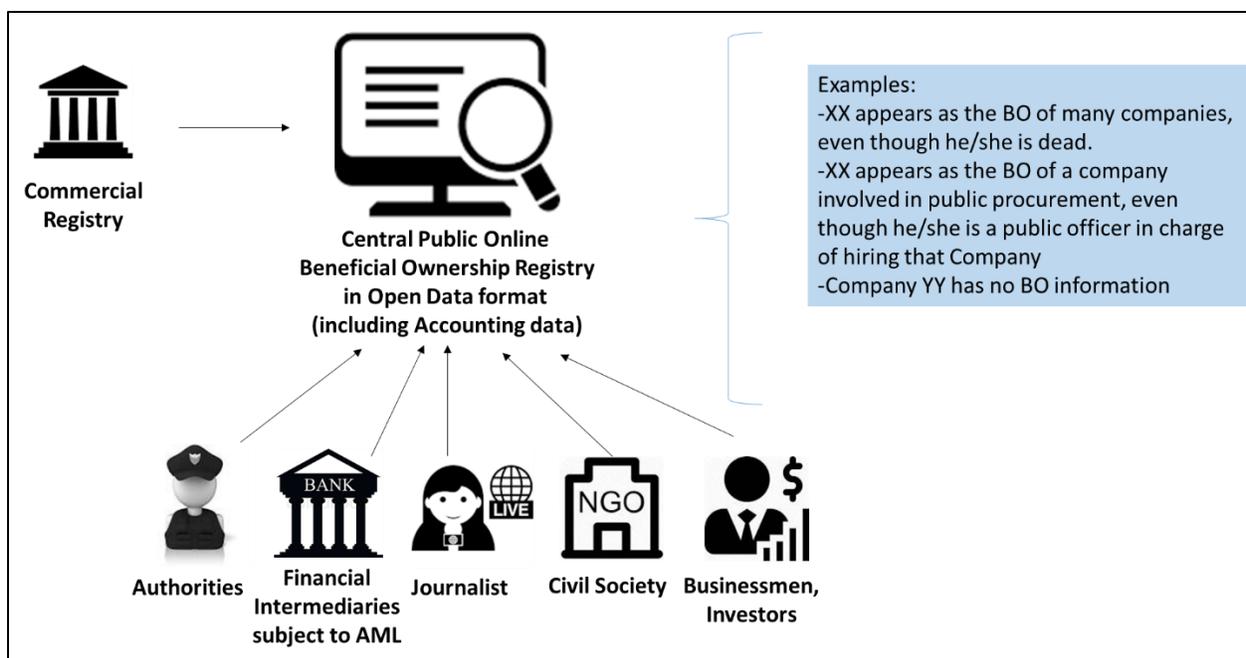
²² <http://www.lanacion.com.ar/2029060-subsidios-a-colectivos-como-se-gesto-la-estafa-de-la-decada-con-millones-de-pesos-que-volvian-a-funcionarios>; 31.5.2017.

²³ <https://www.globalwitness.org/en/blog/what-does-uk-beneficial-ownership-data-show-us/>; 3.3.2017.

²⁴ You may wonder how much this is from the whole. What if this is only 0.1% of all UK companies? A percentage is not relevant here. We know that most existing legal entities in the world are legitimate and legal. But those aren't the problem. 10 companies would enough to be involved in major corruption or money laundering activities for millions of dollars. The fact that there are 10 of them wouldn't make it any easier to find them either, unless technology is applied to all legal persons and trusts.

²⁵ 76 beneficial owners shared the same name and birthday as someone on the U.S. sanctions list.

²⁶ <http://www.infobae.com/economia/2017/04/16/ley-de-emprendedores-el-gobierno-anunciara-mas-financiamiento-para-crear-empresas-en-24-horas/>; 16.5.2017.



7. More rights, more checks

Once a company exists, it can do many things, such as have a bank account or own real estate. But the system established to prevent money-laundering (AML) knows that, even under the best case scenario, where the BOs provided accurate information, valid passports, and all of their information was consistent, there are still risks. If the company is new and not yet involved in any transaction, there isn't much profiling one can do. For this reason, the fact that a company has been created should not mean that checks are over. For any new transaction that a company wants to undertake, new checks are necessary (and will still be necessary even if artificial intelligence and blockchain are used).

While tax authorities will do a minimal check before issuing a tax ID (after all, they want the company to operate as soon as possible in order to raise tax revenue), banks, real estate registries, brokers, or any other "obligated entity" performing customer due diligence or know your client provisions to prevent anti-money laundering, will still have to do checks to establish at the very least the legal origin of the funds (deposited in the account) or used to buy real estate. Continuous monitoring will be required to identify suspicious transactions that could be covering up a money laundering or tax evasion scheme.

In other words, the BO registry checks are necessary and will complement, but cannot replace all the other relevant checks to be performed by banks and other obliged entities. These do not look only at the identity of the BO but go beyond that, especially checking the origin of their funds, the type of transaction, etc.

