

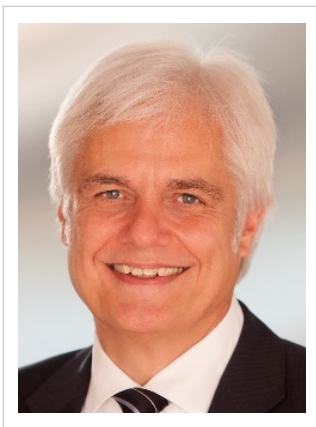


Global Legal Entity Identifier Foundation (GLEIF) Webcast

Advancing Digital Identity with the LEI

December 2018

Introducing presenters



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Agenda



1. Entity identification in the digital age: Key challenges
2. GLEIF Certification of LEI Mapping: Interoperability across multiple ID platforms
3. LEI search tool 2.0: Connect the corporate dots globally
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5. Global LEI System 2.0: LEI and blockchain considerations
6. Competition in the Global LEI System: GLEIF lowers per LEI fee collected from LEI issuers by 35%

GLEIF: Who we are and what we do



Who we are

GLEIF is a supranational not-for-profit organization responsible for ensuring the operational integrity of the Global LEI system.



What we do

By providing free access to open, standardized and high quality legal entity reference data, we enable smarter, less costly and more reliable decisions about who to do business with.

Key terms: Legal Entity Identifier & Global LEI Index



Legal Entity Identifier (LEI)

20-character, alpha-numeric code based on the ISO 17442 standard developed by the International Organization for Standardization (ISO).

Connects to key reference information that enables clear and unique identification of legal entities participating in financial transactions.



Global LEI Index

Publicly available LEI data pool can be regarded as a global directory, which greatly enhances transparency in the global marketplace.

Only global free online source that provides open, standardized and high quality legal entity reference data on who is who and who owns whom.

Entity identification in the digital age: Key challenges

Entity ID in the digital age: Key challenges



- The way we work has been revolutionized by technology.
- As part of this, the automation and digitization of many manual processes within and across organizations has led to considerable time and cost saving.
- The rise of digital technology has also significantly simplified the process of setting up a business, as well as making it easier to conduct cross border deals and enter new markets.
- In this increasingly globalized digital economy, a few clear challenges emerge.
- One of which is verifying the identity of customers, partners and suppliers which remains a time-consuming and costly process.

Entity ID in the digital age: GLEIF research findings



There is no one stop shop for identifiers

Institutions use, on average, 4 identifiers

Identifiers are often inconsistent

49% report issues with the same ID being used for different entities

47% report that an entity may have more than one identifier

Entity verification therefore creates a significant burden

It typically takes 6 weeks to onboard a new client

57% of sales people spend at least 1.5 days a week onboarding

Entity ID in the digital age: Long processes can lead to loss of business

Around 15% of business is at risk as a result of the client losing patience with the process.
And 14% of business is lost because the client identity cannot be verified.

Proportion of business estimated to be lost:



14% TRANSACTION IS REJECTED

Because not enough information is known about the legal identity of the counterpart



15% LEGAL ENTITY LEAVES

Because onboarding process is too difficult / takes too long

55% AGREE

Prospects might turn to competitors if it takes too long to onboard them as new client organizations

Entity ID in the digital age: New technologies are expected to become part of the process



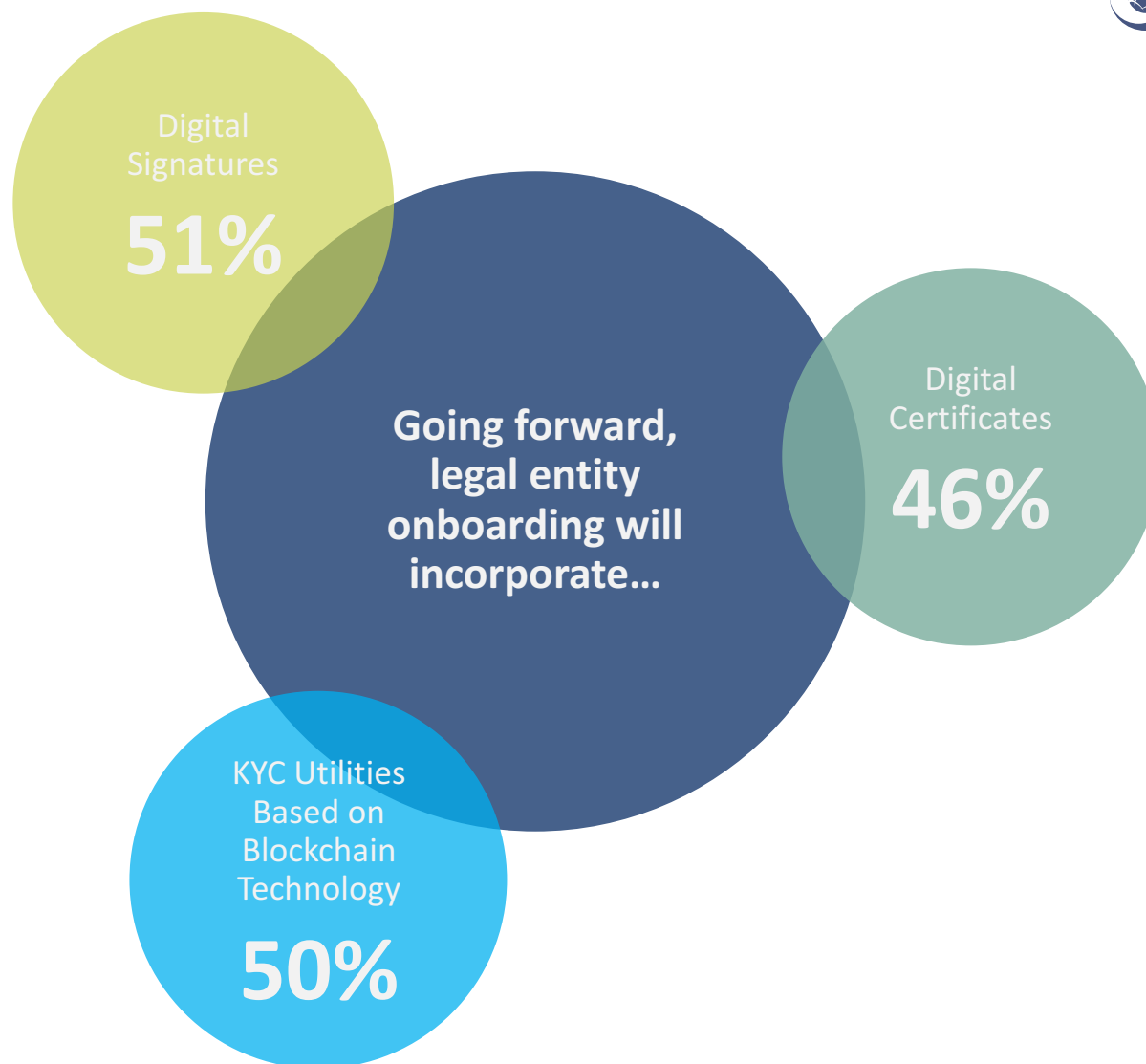
The majority of financial institutions expect new technologies such as digital signatures and blockchain to be integrated in the onboarding process of new client organizations.

	Company Size	
	0-250	250+
Digital Signatures	42%	62%
KYC Utilities Based on Blockchain Technology	36%	66%
Digital Certificates	44%	49%

But

61% AGREE

The rise of digital will make identity verification harder due to a rise in the number of legal entities transacted with.



- 1** Institutions are facing an increasing burden as a result of the need to comply with KYC
- 2** Lack of reliable and consistent identifiers is creating more work and less certainty
- 3** There is clearly an opportunity to align on one identifier to generate efficiencies

GLEIF certification of LEI mapping: Interoperability across multiple ID platforms

GLEIF Certification of LEI Mapping



- GLEIF has established a free of charge certification process – the GLEIF Certification of LEI Mapping service - to ensure that organizations which map the LEI to their own identifiers use state of the art methodologies and / or processes to do so accurately.
- **Data vendors and other organizations can benefit significantly from mapping their applicable identifiers to the LEI.**
- Vendors engaging in the GLEIF Certification of LEI Mapping service provide enhanced functionality to their customers.
- Interoperability across parallel ID platforms significantly streamlines entity verification processes and reduces data management costs for data users.

GLEIF certification of LEI mapping



- Certification, and the subsequent publication by GLEIF of publicly available, open source relationship files which match Mapping Partner identifiers against corresponding LEIs, eases the process of gathering, aggregating and reconciling counterparty information.
- This can be useful for many purposes including: compliance; regulatory reporting; client relationship management; and due diligence.



GLEIF certification of LEI mapping: BIC to LEI



- GLEIF piloted its Certification of LEI Mapping service in February 2018.
- Publication of the first monthly open source Business Identifier Code (BIC)-to-LEI relationship file which is built upon a mapping process established by SWIFT and certified by GLEIF.
- The file matches BICs assigned to an organization against its LEI.
- With the launch of the open source BIC-to-LEI relationship file, GLEIF and SWIFT pioneered a cooperation model that, for the first time, enabled market participants to link and cross-reference key entity identifiers free of charge.
- The open source BIC-to-LEI relationship file is an important step towards consolidating information. This will significantly reduce the cost associated with entity verification to date.

GLEIF Certification of LEI Mapping: BIC to LEI



“The BIC-to-LEI relationships and related regulatory reporting data are in high demand by market participants. Mapping LEIs can be resource intensive, but at SWIFT we have a dedicated team focused on establishing the relationships to the highest quality. We look forward to working with GLEIF and the industry as we continue to help streamline compliance with Basel II and other regulations.”

SWIFT’s Global Head of Payments, Harry Newman

GLEIF certification of LEI mapping: ISIN to LEI



- On 4 September 2018, ANNA and GLEIF announced the signing of a new initiative to link International Securities Identification Numbers (ISINs) and LEIs.
- The new, global initiative will map new and legacy ISINs to their corresponding LEIs.
- Once implemented, the ISIN-to-LEI mapping table will be made freely available to all without restriction on both the GLEIF and ANNA websites.
- ANNA and GLEIF believe that by linking the two ISO standards together, firms will be able to aggregate the data required to gain a clear view of their securities exposure within a given issuer and its related entities.



LEI search tool 2.0: Connect the corporate dots globally

LEI search tool 2.0: Enhanced functionality



The beta version of the LEI search tool 2.0 provides enhanced options to easily access open, standardized and high quality LEI data.

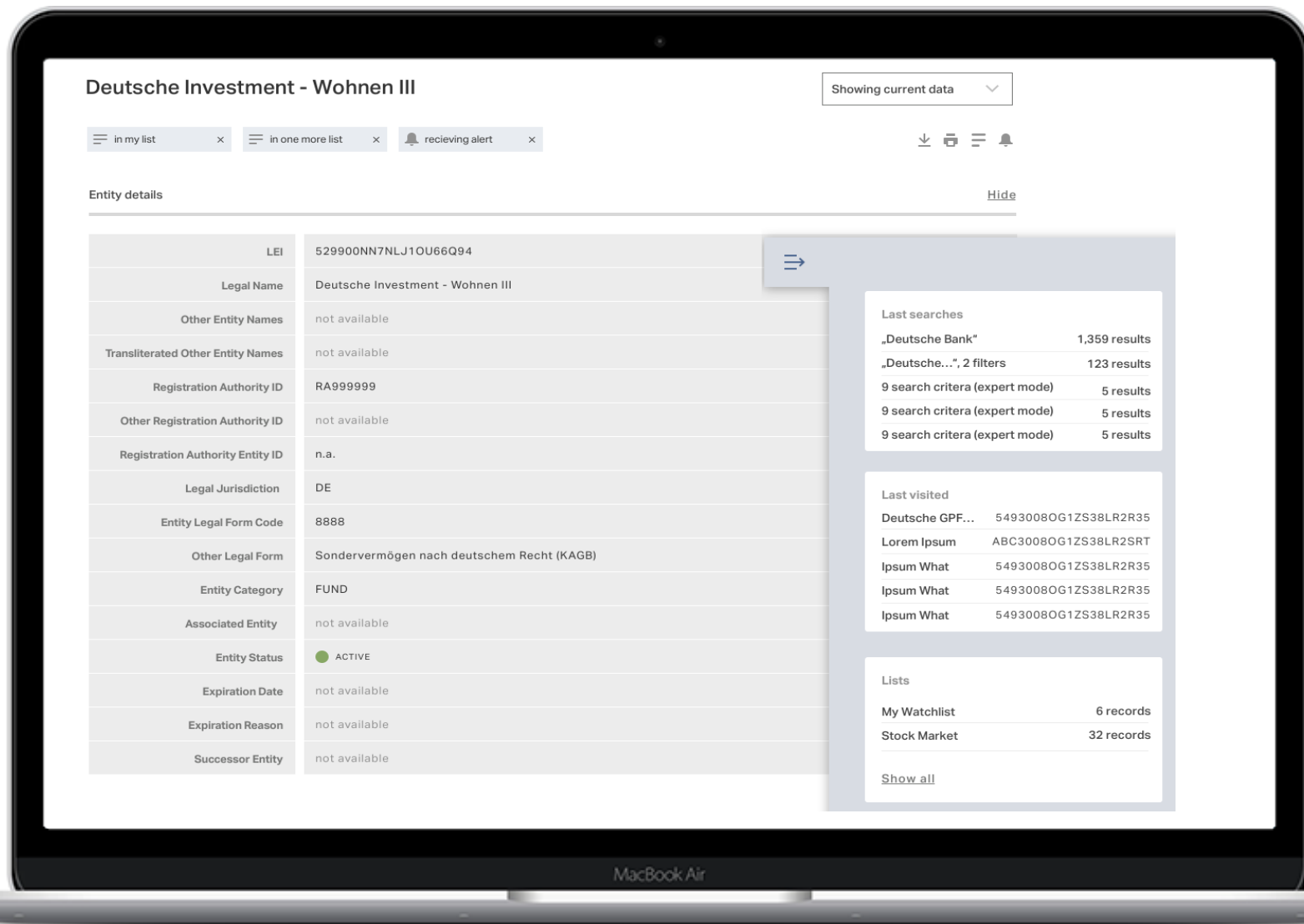
New user interface supports quick and customized research

The new and intuitive user interface is built on a Google-like approach that allows users to quickly research specific information on a legal entity by entering a search term into a text bar. Queries can be tailored to the specific needs of LEI data users with the use of search options and filters.

Other identifiers mapped to the LEI automatically show with search results

The LEI search tool 2.0 automatically pins the corresponding BIC to an LEI record, where applicable. As new partners join the 'GLEIF Certification of LEI Mapping' program, other identifiers linked to an LEI will also show with search results.

LEI search engine 2.0: New design



LEI search tool 2.0: Information on who owns whom



- **Ownership information is easily identifiable:**
 - Market participants can now identify the direct and ultimate parents of a legal entity and, vice versa, the entities owned by individual companies, provided that both child and parent entities have an LEI.

- **If the parent of an LEI registrant has obtained an LEI:**
 - LEI of the parent(s) is published together with the LEI record of the child entity. Likewise, the LEI record of an organization that is the direct or ultimate parent of another organization that has obtained an LEI will display the LEI of the child entity or entities.

LEI search tool 2.0: Information on who owns whom



The screenshot displays the LEI search tool 2.0 interface on a laptop screen. The main window is titled "Level 2 Data: Who Owns Whom" and features a "Hide" button in the top right corner. It is divided into two main sections: "Parents" and "Child entities (1,241)".

Parents section:

- DB USA Corporation (Direct Parent)
- ZIM Corporation (Ultimate Parent)

Child entities section:

Deutsche Investment - Wohnen III

- Baron Select Funds - Baron Health Care Fund (Type Lorem Ipsum)
- ZIM Corporation (Type Lorem Ipsum)
- Centro Social dos Funcionários do Município de Sardoal (Type Lorem Ipsum)
- FIN.EOR SOCIETA' A RESPONSABILITA' LIMITATA (Type Lorem Ipsum)
- BOSTON ELETTRONICA SRL (Type Lorem Ipsum)
- Tellico Classic - Obligationen Welt (Type Lorem Ipsum)
- Peter Melz Aktiebolag (Type Lorem Ipsum)
- NISHANT ENTERPRISES
- Centro Social dos Funcionários do Município de Sardoal (Type Lorem Ipsum)
- FIN.EOR SOCIETA' A RESPONSABILITA' LIMITATA (Type Lorem Ipsum)
- BOSTON ELETTRONICA SRL (Type Lorem Ipsum)

A "More Relationships" button is visible next to the "Centro Social dos Funcionários do Município de Sardoal" entry. A "Show all (1,241)" button is at the bottom right of the list.

Relationship data modal:

The modal is titled "Relationship data" and has a close button (X) in the top right corner. It contains the following sections:

- Parent LEI Name:** Includes a dropdown menu for "Showing current data" and a "Child LEI Name" field.
- Relationship details:** Includes a "Hide" button and a table with columns for "Child Entity" and "Parent Entity".
- Registration details:** Includes a "Hide" button and a table with columns for "Level 1", "Level 2", "Level 3", "Level 4", and "Lorem Ipsum".
- Relationship record data history (Timeline):** Includes a "Show" button and a "Challenge relationship record" button.

LEI search tool 2.0: Public Consultation



- The new LEI search tool 2.0 makes it even easier to take full advantage of the publicly available LEI data supporting even more use cases and applications.
- To ensure the tool continues to evolve in line with market needs, GLEIF invites comments on this beta version of the LEI search tool 2.0 by **June 30th, 2019**.



Outlook on new GLEIF API: Automatic access to complete Global LEI System data

Outlook on new GLEIF API: Automatic access to complete Global LEI System data



Current GLEIF LEI Look-up API

- Provides developers with the opportunity to directly access the complete LEI data pool in real time and to perform on-demand checks for changes to specific LEI records in a convenient, easy-to-read format.
- Makes it possible to easily find up to 200 LEI records included in the Global LEI Index with one request.
- Use of the API is free of charge and does not require registration.

Outlook on new GLEIF API

- Will allow searching based on any LEI record field plus a selection of parent or child entity data fields.
- Possible to search by LEI or legal entity name or matching BIC.
- Will allow for bulk search results, e.g. return all LEI records with an address in China.
- Search results will include direct and ultimate parent reporting information.
- Search results will be enriched with additional LEI reference data.

Global LEI System 2.0: LEI and blockchain considerations



The current file based collection and distribution model has almost reached the end of its journey.



Upload, parsing and distributing large files is time consuming and no longer state of the art.



Could the data collection and distribution within the Global LEI System leverage distributed ledger technology? Or are other technology solutions preferred?

Global LEI System 2.0: Using the LEI within blockchain solutions



- DLT prototypes for customer on-boarding and financial transactions are happening around the world.
- A missing component of such solutions is identity management; specifically, there is no common way of identifying legal entities across such solutions.
- As such financial institutions will end up with a mix of DLT solutions for specific business scenarios, none of which can interoperate.
- One way to address this is to leverage the LEI as an identifier within and across DLT networks.
- Could the LEI within digital certificates be a solution to the interoperability problem?

Public consultation for Global LEI System 2.0



- In 2019, GLEIF will launch, in collaboration with the LEI ROC, a public consultation to evaluate the current structure and the functions of the Global LEI System in order to identify transitional requirements to ensure that the LEI remains a valuable identifier for the digital economy.
- This public consultation seeks to gain feedback from:
 - Financial sector participants such as global banks, development banks, and financial data vendors.
 - Relevant representative bodies of the supply chain management industry, customs and borders organizations.
 - Representatives of digital identification management solutions.



Competition in the Global LEI System: GLEIF lowers per LEI fee collected from LEI issuers by 35 percent

GLEIF lowers fees per LEI by 35 percent



- The Global LEI System is designed to encourage competition between LEI issuers to the benefit of legal entities seeking to obtain an LEI.
- The fees charged for the issuance and maintenance of an LEI are entirely a matter for the LEI issuing organizations and must be cost-based.
- GLEIF is a not-for-profit foundation which makes all its services to users available free of charge.
- In **2018**, GLEIF received **17 US\$** per issued or renewed LEI from the LEI issuers.
- In **2019**, GLEIF will lower this fee to **11 US\$**.
- **This is a 35% fee reduction.**
- Since 2015, GLEIF has lowered the fee per LEI by almost 50%.

We enable smarter, less costly and more reliable decisions about who to do business with



For more information and regular updates on GLEIF activities and LEI developments, visit the GLEIF website which is available in 14 languages at www.gleif.org

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