

# A RegTech Case Study: The Digital Transformation of IPO Applications

## HKEX Business Need

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The success of Hong Kong Exchanges and Clearing Limited (HKEX) as a leading venue for initial public offerings (IPOs) has reinforced Hong Kong's importance as an international financial centre. At the same time that success has placed considerable pressure on the processes and systems used to underpin the mechanics of bringing these IPOs to market.

As a front-line market regulator, HKEX's Listing Division set about tackling the heightened demand for IPOs with designs for a paperless listing application and issuer disclosure process. Physical documents and duplicated manual processing were becoming out of step with modern capital markets.

In recent years modernising the listing application and disclosure process had become a pressing priority due to the growth in the number of listings and the increasing breadth of the listed company regulatory framework. The HKEX Listing Division vetted 357 IPOs in 2020, up 52% from 2010, while the total number of listed issuers rose by 80% to 2,538 over the same time period.

The model that had served Hong Kong's market for many decades required external parties to prepare and submit physical forms and announcements. Internally, the Listing Division was reliant on paper-based, manual workflows to process data and conduct reviews. Downstream teams were required to re-capture and re-input information, potentially impacting data quality and processing capabilities.

A new integrated workflow system would have a major impact on one of the world's busiest listing teams, making its processes more efficient, reducing paper consumption and setting the foundations for further innovation.

## Our Approach

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**HKEX's Group Strategy and Projects team led the initiative to build an integrated workflow solution, which involved extensive collaboration between the Listing Division, Post Trade, and Market Operations.**

The project team designed and developed an advanced paperless listing application and issuer disclosure e-form system based on the Adobe Experience Manager (AEM) platform to digitalise the pre-IPO and post-IPO submission processes for the Hong Kong market.

The solution was integrated with back-office systems with the goal of delivering productivity and efficiency gains, reducing manual errors and improving morale amongst staff who were relieved of repetitive tasks that could be automated.

Full-scale development of the project began in Q4 2019. The solution will be fully rolled out in 2021 and divided into four stages to facilitate the adoption by market participants in a gradual and orderly manner.

## Efficiency Gains

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HKEX has now developed a digital listing application and issuer disclosure process that standardises the input of data, with validation of data based on the Listing Rules. The new framework also provides an online submission platform with back-end system integration. HKEX's e-forms are unique among global exchanges in that they also offer a dynamic, content-aware layout and provide in-form calculation, further simplifying the job of those submitting forms and data.

The project will digitise approximately 56 different manual forms submitted by issuers as required by Hong Kong Stock Exchange's Listing Rules, automate the Listing Division's back-end processes, and integrate with downstream corporate action straight-through processing in Post Trade and Market Data. It is anticipated that a total of 75,000 physical forms will be digitised each year, covering 80% of corporate action announcements.

The first early gains are already being seen in the Listing Division's automation of IPO vetting and regular reporting processes. The savings in manual labour have been considerable. For example, automating the processing of the Monthly Return and Next Day Disclosure Return saves about 23 man-days in manual effort each month. This manual effort was typically concentrated in a five-day period each month, creating considerable stress for employees.

This digital transformation has also brought significant environmental benefits as it greatly reduces paper use. Sustainability is a cornerstone of HKEX strategy and the first batch of document digitisation, which included e-forms for internal use only, has alone saved 23,000 paper forms per year.



**23,000+**

paper forms per annum  
already saved



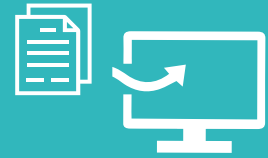
**276**

man-days per annum  
saved on one process  
alone



**75,000**

forms to be digitised  
per annum



## Foundation for Further Change

Digitalisation and modernisation of systems and processes throughout HKEX is part of our commitment to being a technology-empowered organisation and to ensuring the long term sustainability of our business and our markets. This project is one of the digital transformation initiatives being pioneered by HKEX's Listing Division, all of which are linked and together will create a foundation for continued innovation. Other projects aim to further streamline our regulatory operations and expand and automate compliance coverage.

E-forms create a golden source of corporate action data, enabling the automation of downstream information flow, which in turn enables further market infrastructure innovation, such as enhanced multi-party tracking of the IPO process.

E-forms will allow easier access to issuer data and enable electronic comparison by investors by removing physical and logistics constraints. They improve disclosure with auto-tracking and monitoring capabilities, which can help identify areas of risk. E-forms also create new possibilities for data warehousing.

The Post Trade environment will enjoy numerous straight-through-processing benefits, such as direct, more rapid information on corporate actions for clearing participants, replacing information that it previously had to buy from outside providers.

This innovative digitalisation project has future-focused HKEX and its listing function, setting the standard internationally for servicing issuers, regulators and participants in one of the most important fundraising markets in the world. HKEX will continue to use digital transformation to further enhance efficiency and build upon its track record of providing robust and resilient markets. HKEX is committed to being a globally trusted and innovative organisation, focused on the delivery of the highest standards of integrity and transparency to markets and community.



**Watch this video for more information on how HKEX uses technology to transform the IPO applications.**

### Disclaimer

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