CIVICA

A fast, flexible data collection platform
for the world's biggest banks

O.R.X

To offer new services and significantly grow its membership, ORX needed a new, faster platform to collect anonymous loss data from its members – these are household name financial services organisations from across the globe. Built by Civica, the new platform delivers this with security, speed, scalability and flexibility.

When you're collecting sensitive loss data from the world's biggest banks, security is paramount and there is no room for error: leaks are simply not an option. That is the underlying guiding principle of the Operational Riskdata eXchange Association (ORX), a non-profit, member-owned organisation that enables the anonymised exchange of loss data from its member banks, building societies and insurers. Its members include household names from around the world, such as Lloyds Bank, Barclays, Santander, HSBC, Capital One, Bank of America and Schroders.

Regulators require financial organisations to benchmark their losses against their competitors' using external data. ORX is the world's largest provider of this type of data, which

Business benefits

▶ Expand into new sectors

▶ Be more responsive to its members' operational and strategic needs

▶ Reduce its reliance on third parties

▶ Streamline core business processes

▶ Enabling ORX's members to benchmark their losses against others in the financial services sector.

it anonymously collects from all its members every quarter before processing and running rigorous quality assurance on the information. The results are then made available – anonymously – to other members in reports.

To collect and share the data, ORX had been using a customised version of a commercial product. However, the Association and its members were growing increasingly frustrated by the time it took to load and process the data, which was also hampering its growth plans. Moreover, the

Significantly grew its membership

Developed innovative new services in-house

Reduced the time taken for members to upload data by **95%**.

"The speed, scalability and usability of the system will enable ORX to expand its footprint in the global banking sector and insurance markets, where companies face similar regulatory requirements to share loss data."

Jackie Applegate, Chief Operating Officer, ORX

platform didn't offer the flexibility ORX wanted when it came to rolling out innovative new features and services to its members. It needed a replacement that would overcome these challenges.

Security-conscious delivery partner

With no commercial products available to offer the exact features ORX wanted, it went to tender for a bespoke platform.

It selected digital transformation specialist Civica, which has extensive experience in the development and maintenance of highly secure, mission-critical systems that handle enterprise information.

ORX's key business requirements for the new 'Insight' system were:

Ability for members to:

▶ Share data securely and anonymously

▶ View reports of their data alongside others' anonymised data

▶ Communicate with ORX anonymously

▶ Take part in anonymous surveys

▶ Upload data significantly more quickly than with old system.

Ability to:

▶ Scale up significantly, to enable ORX to more than double its membership

▶ Offer new products and services to those members in the future, without the need for software development expertise – i.e. build these services itself

▶ Be flexible enough to enable it to create services for sectors other than banking.

Flexible delivery approach

Built using Microsoft technologies, written in C# and ASP. NET and using SQL Server, Insight meets the requirements, thanks in part to the agile approach used to create it. During development, Civica regularly demonstrated the system to ORX stakeholders, which enabled continual feedback and evolution of Insight to deliver a production system that supports ORX's business aims effectively.

Safeguarding security and member anonymity

Insight's speed, extensibility and ease of use needed to be underpinned by rock-solid security, both around the data itself and in maintaining member anonymity where required. This was a hugely complex setup: certain Insight users are allowed to see which member they are communicating with, while others are not. Members must be able to view their own data and anonymised data from other members, but the latter must not be attributed or traceable in any way.

Prior to Insight, the only way to safeguard member anonymity was the enlistment of a third party organisation, which handled surveys and confidential communications between ORX and its members. Insight has enabled ORX to bring both surveys and member communication in-house, without compromising anonymity.

Working in partnership with ORX's business analysts, Civica created and thoroughly tested a carefully bounded set of permissions to protect anonymity. This includes numerous safeguards, such as preventing the same user from having conflicting sets of permissions.

These measures are complemented by robust physical security, whereby the data is hosted in a secure datacentre and protected by high-level encryption and a hardware security module (HSM).

Immediate impact

Step-change in speed
Insight has made a huge difference to the speed at which ORX is able to work. Firstly, it has slashed the time it takes members to upload their data from three hours (in some cases) to five minutes – **a saving of over 95%.**

Second, it enables multiple ORX members to upload their data at the same time without loss of performance, where previously this was not possible.

Thirdly, it enables ORX's Analysts to run their quality control processes on a member's data while other members' uploads are still in progress. Again, technical constraints meant that the previous system could not enable this: analysts had to wait until all uploads were complete before starting their work. Moreover, the added time afforded by Insight means that ORX has been able to enhance its quality assurance processes.

These combined enhancements mean ORX is able to run its four-week data upload cycle more comfortably, and gives the Association the opportunity to further refine and streamline its business processes in this core area. These changes have been brought about through intelligent selection and application of technology. This included the use of high-end hardware, in-memory validation, a distributed, dynamically generated database and selective data use.

Jackie Applegate, Chief Operating Officer at ORX, comments: "The speed of the new Insight system is, quite simply, amazing, and being able to run our quality control on the members' data in parallel with other uploads means we provide them with a much more responsive service now. If there are queries around a member's data, we're now able to get back to them usually within 24 hours, where before it could take weeks."

New opportunities to grow

As well as enhancing the experience for ORX staff and members, Insight will enable the Association to push ahead with its ambitious growth plans. The speed increases and ability to accommodate parallel uploads mean it can accommodate many more members during its quarterly data cycle, and the design of the architecture enables it to scale both upwards and outwards to accommodate more members and more services with ease.

These factors will enable ORX to expand its footprint in the global banking sector, as well as move into the insurance market, where companies face similar regulatory requirements to share loss data.

Self-service possibilities

Thanks to a carefully designed graphical user interface, ORX can build these complex services itself, including the data schemas, associated business rules and reports. This means it will not face the cost of external development when it wishes to offer its customers new services or move into additional markets.

Applegate adds: "Our ability to branch into the insurance market has been made possible by Insight. We've quickly been able to set up the service that enables insurers to exchange data in the same way the banks currently do. This would have been much more difficult, time-consuming and expensive with our old system. By enabling us to do things like this, Insight has made us much more able to provide what our members want – and provide it quickly."

Reducing reliance on third parties

As well as the new opportunities to grow its operations and revenue, Insight has enabled ORX to reduce its reliance on third parties when it comes to its core operations, thereby streamlining key areas of its business.

Firstly, it no longer requires a third party to act as an intermediary when it communicates anonymously with its members, because this can be done through Insight.

Secondly, by creating the survey system within Insight, ORX no longer has to pay another organisation to run its anonymised surveys. Instead, the process of collecting data and reporting on it is done in-house through Insight.

Superb feedback from users

The acid test for any business system – particularly one so critical to an organisation – is user feedback. Following its first use, Insight received a glowing report in a survey with those who used it. **87% of respondents said their overall impression of Insight was 'Good' or 'Very good'**. Additionally, 80% of those responding said that the crucial data upload and validation process was 'Easy' or 'Very easy', and 75% rated the reporting speed 'Good' or 'Very good'.

The popularity of Insight among its users is partly down to Civica's user-centred design (UCD) approach, under which the company provides dedicated user experience (UX) resource on the project throughout its development. This ensured the requirements were clearly understood and the development team built a system that ORX's users enjoy using.

Regular demonstrations ensured Civica gathered feedback from users, which was fed into future iterations, meaning that the Insight system aligns closely with ORX's business needs.

Future plans

With Insight fully rolled out and being supported by Civica's managed services team, the original delivery team is continuing development of a series of enhancements for the platform.

Applegate explains: "We plan to onwardly invest in the system to give us more features. We've already delivered some improvements to operational management, and the team is working to improve reporting and enhance some areas of the loss database to enable us to do additional things with the data. We're also exploring ways to bring in data from other sources, combining it with what's stored in Insight and create a single view of risk."

Innovative delivery partner

Applegate reveals that the Association has been impressed by Civica's blend of technical expertise and positive ethos. She says: "What Civica has built for us is good – very good, in fact. The team we've had working on it have been excellent, and I've got a lot of respect for them because what they've delivered is great. "What's really come across is the strong ethic among the team to want to produce something of high quality that ORX and our members will want to use.

"In all our interactions with Civica, you can see the team wants to build a system they're proud of and that we can be proud of. That's a wonderful culture to have in your organisation."

Jackie Applegate, Chief Operating Officer, ORX