



## Onyx, by J.P. Morgan wins SWIFT Hackathon 2021

On October 14th 2021 SIBOS [announced](#) that a team from [Onyx](#), a business unit within J.P. Morgan won the SWIFT Hackathon for 2021. Twenty five teams and 180 participants participated in one of two challenges that comprised the hackathon. The 8 person team created a way to generate synthetic data set based on customer information while maintaining privacy. These new synthetic data sets can be used by Machine Learning (ML) systems to develop new products and solutions.

### A deeper look at the challenge

Banks, financial institutions, and payment networks are on a quest to improve customer experience through the development of innovative products and solutions. Often machine learning (ML) and artificial intelligence (AI) are utilized to drive such intelligent solutions. Challenges arise because public data is scarce and privacy of customer data must be protected due to regulations. This was the crux of the problem that the team chose take on.

### A unique approach

The Onyx solution, named FedSyn (short for Federated Synthetic data generation), is a combination of emerging technologies in the areas of Artificial Intelligence/ Deep Neural Networks and Privacy Preserving Analytics. The solution aimed to find a novel approach to allow multiple participants to collaborate and co-create data-driven solutions for their customers and also maintain privacy of their customer data.

The team took the approach even further and implemented an extension allowing for the data sets to be shared collaboratively among member banks to co-create solutions without sacrificing competitive edge. In addition, the team also proposed additional opportunities leveraging Transfer and Federated learning approach.

“ Our success here means a lot more than just winning a competition. It has the potential to provide the financial community with the data they need, regardless of their size or resources, and collectively work to reduce fraud throughout our industry.”

**Ker Farn Lee**  
Product Manager, J.P. Morgan



The implemented solution & proposed extensions will enable co-development of intelligent services and foster a collaborative ecosystem in the financial services.

## Learn more | Join Onyx

If you would like to learn more about the project you may contact us [here](#).

If you are interested in solving tough problems and building the future of finance we are [hiring](#).

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