I looked through what we have for the CTI project with Andreas and Fred, and we found the following:

**Embeddings Docs:**

We don't have a good internal document that is up to date, but we have the initial design doc.

[Embeddings documentation from 2017](https://1plusx.atlassian.net/wiki/spaces/US/pages/68422985/Interaction+embeddings)

[Small section about the embeddings from the 1plusX Architecture Whitepaper](https://docs.google.com/document/d/1Y2geoOy38QyrJ_bNySH5492TV8EUER3i3gfDtMaK5Ek/edit#heading=h.qw0p7o2sxh62)

Yeyao Zhang did some experiments on using Tensorflow to create the embeddings, but apparently gensim worked better and gensim is currently used to learn the item-embeddings.

[Tensorflow vs Gensim Documentation](https://1plusx.atlassian.net/wiki/spaces/US/pages/69702051/Gensim+vs+Tensorflow+on+Word2Vec)

**Demo Application**

There is a demo application created by Vasili and Zacharius, where a customer can "train a classifier on his own data, then run it on different data."

We still have the code and could still run it.

[Design doc with screenshots](https://docs.google.com/document/d/13PDer3NA6dhkesQRK0kS4lhSit_qKQTX-7uIAwbvgbI/edit?usp=sharing)

[Github repo](https://github.com/1plusX/experimental/tree/master/cti/soft_query_mvp/webapp)

**Santander case**  
Maybe not relevant, but Santander is a real case where we:

* Provide embeddings
* Santander trains their own model
* Santander provides predictions
* We reingest these predictions into our system as an additional user attribute

It is not based on Tensorflow, we just share the embeddings with them and they do the training and predictions.

The setup is not fully productionalized, but it could count as an application/commercialization of the CTI idea.

Currently a test campaign with their predictions is running.  
  
More information: <https://1plusx.atlassian.net/wiki/spaces/CUS/pages/349700163/Santander>