Why is telco data so helpful to banks? From my experience in banking, customers prioritise the payment of their mobile bills over their mortgage bills. So why is telco data so predictive when the consumer behaviour is so different with the different products?

In fact, Telcoscore predicts default on a financial product, that is the target variable. We understand that banks would not be interested whether the customer pays to us. In order to predict the financial default, we are using telco data and they are indeed very predictive. Information pool of telco consists of client’s patterns how he/she obeys in telco space – e.g. how much client’s device is used; habits for SMS, calling or internet usage. No matter if mobile bill is paid, there is clear fingerprint in telco data. You can find credible measurable relation “correlation” between a telco pool and bank’s need of risk control. Usually, a bank welcomes when telco added value is additional to the bank’s pool.

Thin file customers typically bear a high fraud risk to banks - so whilst I can see the upside to better assessing these customers, I can also see considerable risk. How does your modelling account for fraud in this segment?

In the models, fraud would appear as any other default. Thin file customers would probably have a short history with telco as well, therefore their average Telcoscore would in the end be lower. Moreover, there is high potential for protection of fraud risk in Telco data and some FI already use TelcoScore as antifraud tool (e.g. information of PrP SIM cards).

Is this a service available from all operators? If not, how does the bank know that their applicant is your customer?

In Czech Republic yes. Online customer opts in. In branch the bank asks the customer. In Turkey no, Partner integrates into channels.

In addition, how do MVNOs that has married both GSM services and Banking get to leverage and not only the MNOs as we have growing trends of this type of business models including Fintechs?

Stand-alone MVNOs are not part of our joint venture yet. At the moment, we can only provide Telcoscore for customers served by branded resellers.

How do we then plug this into an OMNI channel and plug to the entire ecosystem and the last mile?

In the Czech Republic the proposition can be used for risk scoring for a wide range of personal credit needs.
How much are the banks willing to pay for each telcoscore?

*We are unable to answer commercially sensitive questions.*

Is the model performance significantly different for a timespan of 3 or 6 months of default prediction?

*In general, the performance can really differ when comparing 3M, 6M or even 12M between each other, as expected. Should I take the best timespan result automatically? It is a matter of product design WHAT is final expectation on Telcoscore application inside bank processes. Open question if a regulatory need is the target vs more Point-in-Time ability to detect changes, e.g. for business selling reasons.*

Why is the Gini value low as compared to post-paid/ pre-paid use cases?

*Gini value is lower in PrP model because there are significantly less predictors available compare to PoP model (missing contract and credit information).*

What is the Average ticket of the loans you evaluate?

*We do not have the information about which products Telcoscore is used for. Our best guess is that majority of loans would be around 1k EUR.*

Do you take in consideration the average ticket to the evaluation?

*No, we do not have that information.*

Is service available for reselling or only directly to enterprises?

*In the Czech Republic the service is supplied into market via the partner SID as intermediary, but the product is not available for reselling. In Turkey the service is a direct relationship with Turkcell.*

Are the models designed specific to each FI? Or is it one model used by many FIs?

*In Turkey they are bespoke models. In the Czech Republic it is one model that all FIs use.*

How often the scores are refreshed?

*Scores are calculated on-line based on a request. Scores are refreshed on monthly basis in general. Some variables that plays role of important predictors can be refreshed on daily basis (optional).*

Who owns the IP/Patent on the algorithms is it operators or FIs or joint IP?

*Operators*

Could you explain why the three MNO (2, T-Mobile, Vodaphone) can work together for this project? The three are competitors, so it would be difficult to collaborate if one of them would like to expand its own customer base.

*The MNOs do not compete on the provision of this product. All MNO meetings were, and still are, chaired by a lawyer to ensure there are no anti-competitive practices All 3 MNOs use as intermediary the SID who distribute Telcoscore between operators and FI. At the same time SID guarantees that MNOs do not ask for Telcoscore of each other. (mutually hidden data)*
How did the MNO relationship come to be? How can the model be replicated in other countries with a more disperse MNO ecosystem?

In the Czech Republic the MNOs are members of the credit bureau, given they both use and supply data for credit scoring customers for mobile phone contracts. It was here that the banks discussed if MNO credit risk data could help them risk score loans. We believe that the solution is transferable but must be treated according to particular country/market.

Regarding GTM pricing of credit scoring, is it based on per API call or is it based on percentage of loan value?

*Per API call.*

How important was it for you to know that you could rely on a central credit bureau as a way to decrease the overall risk?

*There is very limited data on underbanked customers at the bureau which is why the MNO credit risk product is helpful.*

What suggestions would you have for mobile network operators/FIs that want to launch digital credit but are in countries where there is no central credit bureau?

*MNOs can utilise their own data to help assess risk. The solution could be to establish credit bureau or another intermediator.*

Application of score model approve most post c-19 we are going digital with minimal contact points with paperwork all is happening digitally at the comfort of my device anytime, anywhere so the approval happens instantly. How flexible is your model to adapt to changes to fit business model?

*The current models are stable, are regularly validated and the impact of c-19 will be incorporated when relevant amount of date will be available.*

Data protection as well has become key in most countries and customers privacy how do ensure this is achieved whilst complying to regulations and compliance from 1 country to another?

*In the Czech Republic the proposition was audited by the Office for Personal Data Protection as fully compliant with GDPR which would mean it is fully transferrable across territories where GDPR applies. In Turkey, Turkcell works very closely with its own Data Protection team as well as regulators to ensure its proposition comply with regulations.*

Security and intelligence how secure is this bearing in mind 3rd party plugging into the bank eco-system, is the model you have willing to comply with the regulations and work ethics and model governance of a given organization to ensure both external+ internal customers not compromised?
In the Czech Republic Global Payments is the technical integrator into the banks and has been for many years. The risk scoring proposition uses established routes to confirm the risk score. No PII data is transferred. In Turkey no PII data is transferred.

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<tr>
<th>What is the detail procedure of POC. How could ORGANON match hashed data from Bank with customer data provided from Turkcell?</th>
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<tr>
<td>Both Organon and the Bank, hashed the same MSISDN with the same key. So we can say that, we match the customers based on hashed MSISDN</td>
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<th>Please clarify the Organon comment regarding Equipment Manufacturing.</th>
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<tr>
<td>Equipment Manufacturing group takes values like their phone brand. Since the prices of the phone differs it effects the customer probability of default. We thought that the causality comes from, this variables is the proxy of the customer income.</td>
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