## Improving financial resilience of vulnerable consumers Transcript

0:04

okay good morning everyone uh welcome to this showcase session for the digital sandbox pilot 0:10 i'm nick cook the director of innovation at the financial conduct authority and it's my pleasure to welcome you and to 0:16 compare this session focused on the use case of consumer vulnerability can we go to the next slide please over 0:23 the previous 10 weeks 28 teams have taken part in the digital sandbox pilot the 0:30 pilot's been focused around three use cases relating to issues that have been caused by or exacerbated by the coronavirus 0:37 pandemic 10 teams have been developing solutions relating to the second challenge 0:43 that being around improving the financial resilience of vulnerable consumers now it's the 0:50 case that all consumers are at risk of becoming vulnerable at some point during their lives 0:55 some are vulnerable for lengthy extended periods others experience more temporary or 1:01 short-term vulnerability and we expect that firms should treat customers fairly and in order to do that 1:07 they need to respond to the needs of all consumers but we expect them to take 1:12 particular care to ensure that they meet the needs of consumers at the greatest risk of harm and that 1:19 includes vulnerability to financial shocks and things like that so kovid's been a bit of a twin crisis 1:25actually it's been both a health crisis clearly um and my thoughts uh with you and yours as we all battle through this difficult 1:32 time but it's also been an economic crisis uh and unfortunately like many economic crisis is often the most 1:39 vulnerable who are hit hardest during these times and just give you a little bit of a sense of how the 1:45

pandemic has has deepened and worsened vulnerability for many people 1:50 we see that approximately four million additional adults have experienced characteristics of 1:56 vulnerability during the pandemic when it comes to financial vulnerability we know that over a million people have 2:02 lost their jobs and a total of around nine million have seen some fall 2:07 in their income be that furlough reduced hours pay cuts we also know that 2:14 around 13 million adults think that they will struggle to make ends 2:19 meet in the next six months um and guite shockingly about five million 2:25 adults in the uk say they are likely to use a food bank in the coming months 2:31and many of these are are indeed the youngest adults in our society the 18-24 group 2:37 we've also seen a very significant increase in the number of people using debt advice and debt management services 2:43around a million adults have used one of those services for the first time during this pandemic and again we see 2:49that uh when we look deeper into that data it tends to be the younger adults in society the under 2:54 35s and regrettably is the black and minority ethnic 3:00 members of society that are even more likely to be included in those groups requiring debt advice seeking 3:08 assistance with their um with their money during this very difficult time so resilience and vulnerability are 3:13 issues affecting millions of people and today's event is an opportunity for the teams to showcase some of the 3:18 solutions they've been working on to try and address some of these important needs and i think you're on the right side so 3:24 this is this is great thanks um so what is the sandbox the digital sandbox is uh the result of a 3:30 partnership between the financial conduct authority and the city of london corporation together with numerous financial 3:36

services technology and academic collaborators who have come together to try and create a new testing and development 3:42 environment to support innovation in the financial services we know from our engagement with reg tech and 3:49 fintech firms that often one of the biggest challenges is taking an idea from a proof of concept 3:54 into a proof of value and demonstrating how it could be applied in the real world and we often hear that access to both 4.00data and access to expertise are some of the most profound barriers that entities face when they're trying 4:07 to scale up and develop and prove out their innovations so we collectively 4:12 have sought to address these challenges or at least have a first stab at doing so um in this pilot phase in the digital 4:18 sandbox um which we hope will act as both a catalyst and an accelerant for desirable 4:24 innovation in financial markets next slide please the digital sandbox 4:30 in its pilot form has a number of features there is lots of further detail on this on the digital sandbox pilot 4:36 website but in brief uh just to give you a bit of an overview there are a range of high quality uh data assets 4:43within the uh the sandbox environments these are both synthetic assets that have been created 4.49for the purpose of these um experiments and various anonymized real world data 4:54 sets as well and again a thank you to those entities that have helped create those data sets and indeed have 5:00 gifted and lent their data sets into into the pilot um within the pi within the pilot 5:06 environment as well there is a an integrated development environment a cloud native infrastructure to enable 5:12 participants to develop and test their solutions there are a range of apis i think in the 5:17 order of about 300 or 350 from fintech red tech and other vendors to allow some plug and play 5:24 development and to aid in the development of more interoperable solutions

and then there was also an observation deck a space for interested parties to witness and observe the in-flight

5:35

development and testing and then kind of link to that a collaboration platform and a space for free communication between

5:43

the teams between the teams and observers and mentors and i should just take this brief moment

5:49

to thank those who have supported mentored and advised the teams during this pilot phase of the

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sandbox thank you very much for your contributions your expertise and and the commitment of your time is

6:01

very much appreciated next slide please so what's been happening 6:06

uh teams have had about 10 weeks to develop their solution and i do note those 10 weeks also over christmas and a new year

6:12

period so maybe 10 weeks is a slightly generous description of how long they've had um we've seen hundreds of user accounts

6:18

created on the platform over 5 000 unique visitors have engaged with the website um over the past couple of months and

6:26

several hundred of you have signed up for what are said to be three showcase sessions this is the second of three the

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third is tomorrow we've also had a number of mentors i mentioned those briefly 6:37

already who have been supporting the teams several dozen of those that have come forward and helped teams with

6:43

technical regulatory and other advice and we've seen very lively use of both 6:49

the collaboration tools the communication tools alongside several hundred thousand calls

6:54

on the apis um and various other uses of the infrastructure and the technology that 6:59

we've made available so it's been a lively couple of months next slide please 7:05

today each team and there are 10 of them each team will have 10 minutes in total 7:10

they will have 6 minutes to present after which they will be rather cruelly silenced and i apologize for that

7:16

and then we'll allow four minutes for q a please add your questions into the chat bar on the side

7:22

um i'll try and ask the teams a selection of those and any we don't get to during the four minutes

7:27

we'll ask the teams to respond to him writing in the sidebar as best they can we're going to run 10 demos back-to-back

7:34

uh which is going to be quite an ordeal for everyone so make yourself comfortable 7:40

and i hope you enjoy it and get to engage with the uh the developments and the solutions

7:45

that the teams have pulled together so we're gonna make a start without further ado and i believe the first up

7:51

is an entity by the name of prince6 over to you please thank you

7:59

so thank you everyone for your time um let me explain what we've been spending our time doing firstly can i

8:06

thank the city of london corporation and the fca we found the experience very helpful um we found the

8:13

experience uh helpful because of the connections and the network to open to us of experts in this field so we could

8:19

test theories and ideas uh

8:24

let me just move um um so what were we what were we looking 8:30

at specifically what we were looking at is what's the limit of the digital journey where do they stop and where do people

8:38

have to get involved where do you have to start involving a human and what practically does that actually

8:44

mean how does that work and what is the nature of that intervention 8:49

and can we make a difference there can we contribute to that and just to remind anybody who hasn't

8:54

seen this or the the when we did the first demo day the four key components of our platform

9:00

is dynamic journeys uh these are journeys that adapt and so you can create very personalized uh

9:06

journeys and onboarding journeys for for applicants this is behavioural insight so every 9:11 part of the journey is tracked and you can see where people are on a real-time basis and you can respond to 9:16 those behaviors these are code free and so you can configure them and you can create very 9:22 rapid changes and these are testable you can do split tests and you have multiple journeys testing so you can have controls 9:28 and you can have alternative journeys so let me tell you some of the initial 9:34 takeouts i'm going to tell you the answers i'm not going to make any arguments of why i concluded this if you want to learn about that or talk to me 9:40 about that connect with me over linkedin i'd be delighted to have that conversation 9:46 firstly today's onboarding is very much when we talk about it we talk about it between apply now 9:51 and you've been approved that was very much my mindset starting these this process and it's very much about 9:57 when do i as an organization need to speak to you as an applicant um that's very narrow it's too narrow 10:05 actually the journeys of tomorrow should extend before uh you've been beyond vou've been 10:11 approved they should look um beyond there because you'll have a more open conversation because people 10:16 aren't moderating their behaviors to get approved you can understand more about them and you can behave in a way as a firm 10:23 that can reflect certain vulnerabilities that might be more willing to share with you and it's a two-way 10:29 conversation you should be aware that actually the customer might all applicant might need to speak 10:34 to you and their behaviors might indicate that so you should facilitate that i'm not 10:40 talking about just a floating chat bot i'm talking about proactive reach out to customers and saying actually can i help 10:46 you uh in that fun we looked at the vulnerability of financial triggered by financial resilience the

conclusion is that those are best done digitally because digitally allows evidence based

11:00

on when i say digital i don't mean just ux journeys i'm talking about credit data i'm talking about um about

11:06

banking data so should be evidence-based they should be comprehensive and 11:13

actually customer interactions for the economic risk um are pretty unreliable 11:21

talk about other vulnerabilities that's a very different situation and it's a much more nuanced uh position

11:28

in which a combination of digital uh and human connect contact

11:33

uh is the the value into and that's how you should cope with those things but needs to be

11:39

targeted targeted specific individuals and so for all of this view

11:45

yes principles can help um through those four components they can add real value um to this uh to this situation

11:54

let's look at mixed journeys though that's the real challenge um so the positives the positives is

12:00

actually vulnerabilities are well understood everybody i spoke to understood what those potential vulnerabilities were they understood

12:06

what those potential poor outcomes were um and they all had huge a number of ideas around what could be done to

12:12

potentially uh mitigate all of those there's this uh emerging concept of behavioral 12:19

economics i only scratched the surface the nudge theory okay but it's clearly 12:24

growing at a pace across regulators and across large firms that uh can be very powerful in terms of

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um how you deliver journeys that are help other are good for customers and there is evidence

12:39

that actually you can see flags in historic data and past data and behaviors there is evidence that

12:44

there are flags that show potential risk of vulnerability the negatives are there's little 12:51

evidence of best practice everyone's got ideas but no one's got tried them and proven

how they should work there's a general mindset a continuation of this one size fits all this is the journey 13:06

and that drives a binary conversation around around everything can be digital or no you need

13:11

to speak to a human in every circumstance

13:16

and although you can see flags that flags risk of vulnerability it doesn't actually address the

13:22

vulnerability it doesn't provide any clue around what you then do 13:28

and there are constraints today there are constraints today which is change is slow to implement so it's hard

13:34

to test and you can only change things one at a time because you can't do multiple 13:39

journeys so you have a sequential test process um and so changes impact large 13:46

populations and so the reality is that commercially high risk for for firms and so firms are naturally

13:52

disincentivized from doing a lot of innovation in this area because they worry about the large population

13:58

who aren't vulnerable being affected by finding the small population there are 14:05

but we found one thing that i'm really excited about in terms of how principles can really actually make a difference in this piece

14:12

and this the all of those four components is the ability to test and concurrently test 14:17

multiple journeys and it allows you to start getting evidence of 14:24

how invert innovation can make a difference those ideas that everybody's got you can

14:30

put them live you can do parallel tests see what drives better customer outcomes you can target them towards small cohorts you

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can do them across multiple devices and you can do them at a minimum a 14:43

commercial risk to firms and because it's configured not coded you can do very rapid innovation

14:50

very rapid cycles turning and implement and implementing different journeys so the learning

14:56

cycles are short julian sorry to interrupt just giving you a time check here okay 15:01 thank you and uh journeys uh can give you actual insight and the cost is uh low and undisruptive 15:08 so finally very quickly out of this what i would love to do is i'd love to find uh sort of it i would love to find lend 15:16 get lenders regulators specialists uh interest groups uh us with some funding 15:22 to test this let's put journeys live through collaboration and start getting true evidence of what are good 15:30 ways of combined journeys thank you 15:42 julian thanks very much for your presentation six minutes brutal uh i think i would say but uh 15:47 well done and thank you for taking us through it um you spoke a bit about the 15:52 uh the vulnerabilities that are easier to address and deal with what what do you think success looks 15:58 like then in the event that you develop these uh more bespoke journeys what's 16:03 what's the consumer experience of that what's the consumer benefit of that and can you talk to us about how that 16:09 sits alongside the costs of firms implementing that so can you give us a bit more of a branded view of what this 16:14 delivers for the end consumer yes so i think that um 16:19 what good looks like is that as you see flags of vulnerability you can explore them but you don't put everybody through 16:27 that journey if there's no flags of vulnerability because then so you target your effort 16:34 and you explore specific circums on specific individuals who are higher risk so you identify the risk 16:40 and then you create journeys specific for them in terms of the cost the cost of implementation if you do it on a 16:46 one-size-fits-all is the impact it has on the population that isn't uh isn't vulnerable yeah and things like 16:53 acquisition costs go up um and then the other cost is development cost i.t overhead of doing 16:59

uh change is always really really hard um i think what good is is you create and i think this is where we 17:05 help you create an environment in which um firms are encouraged and actually that well they're not penalized for 17:12 innovating for changing that they can actually proactively innovate without 17:17 always being worried about am i going to damage all my my commercial performance am i 17:22 going to impact all those customers that show no signs of vulnerability because 17:28 i'm trying to deal with the small population that i'm concerned about 17:34 thank you um we'll take one more question one from you and in the sidebar what do you see as the biggest barriers 17:39 to adoption of a princex type approach so you spoke about some of the barriers of the current approaches and 17:44 what makes it difficult what do you think might be some of the barriers to adoption of this this model um i think the current model 17:50 where you hard code a journey is so embedded in everybody's uh in 17:55 every thoughts that actually taking this different approach clearly is a kind of education 18:00 uh process i think it's new and anything new it takes uh time to understand um and SO 18:07 i think it's the you know the level of innovation and it's so we have to find people who have an 18:13 appetite to innovate um and obviously you know regulatory institutions like 18:20 everything to be locked down and stable so i think there's a different attitude around compliance and regulators 18:26 to have fast moving changing circumstances but in a safe way 18:34 julian thank you very much uh a call to arms at the end there from julian for various participants please reach out to him if 18:40 you'd like to know more about the solution julian thanks for your time this morning i appreciate that 18:48 with 24 million adults in the uk now showing at least one sign of vulnerability and 12 million struggling to pay bills

loans and credit cards off this year let's not beat around the bush things are tough for a majority in this country 19:02 these issues existed pre-covert but the pandemic has shown a spotlight and exacerbated the need to strengthen the 19:07 financial health of those that are overstretched financially vulnerable and in need of better control 19:13 of their finances i'm craig buchan the founder ceo of cupal we're the scottish fintech 19:19 currently working on solving the challenges around financial well-being we believe life can be made a little bit 19:25 easier for those that stress about money we came onto the digital sandbox a few months back 19:31 anticipating that we would build a direct to consumer application similar to the personal financial 19:36 management tools that exist on the market today such as yalt and money dashboard the 19:41 credit to the digital sandbox and the mentors in particular they pushed us to think differently about routes to market 19:46 the pitfalls and challenges of building and scaling b2c products and critically they shared their 19:52 experiences of issues that exist in the workplace environment for employees so we dug in and done some research 19:59 one trillion dollars wiped from the global economy and lost productivity every year as a direct result of anxiety 20:06 and depression in the workplace it's more than alarming how have we as a society let things come 20:12 to that but more importantly what can be done to counter it 20:17 digging deeper with some of the research we came across a number of studies that showed at least 67 of employees are faced with financial 20:23 stress clearly huge numbers when the work went across the working population both domestically and internationally 20:31 these money worries can result in sleep deprivation anxiety loss and concentration or motivation the 20:37

resulting impact being poorer mental health for the employee and a drop in workplace performance and 20:43 output so the question then became 20:49 so the question then became how do we help vulnerable employees take better control of their finances and how can we help them service 20:55 existing debt more efficiently we've been successfully validating our open banking concept with corporate 21:01 firms since the turn of the year as well as engaging with organizations such as the money and pension service 21:06 and the charity organization money and mental health to learn from their experiences directly on the front line to help shape 21:13 our product development okay your slides are moving to the side sorry 21:19 yeah that's better oh i think we have that problem in the 21:24 first demo they're they're moving again that's better yeah 21:33 okay okay no worries um yeah financial stress and mental health 21:38 in the workplace are intrinsically linked but employers are yet to truly tackle the root cause with limited initiatives 21:44 around financial well-being out there in the market so we figured there has to be a big opportunity to partner with employers 21:50 and professional services firms to strengthen financial health of the workforce with technology 21:56 so in terms of what we're building version one is pretty much a cross between a pfm and a robo advisor 22:01 and centers around a digital assistant that helps users manage their finances better service 22:07 existing credit card debt more efficiently and automate financial advice when the user needs it 22:13 we're working towards pocs in the spring with our partners and look forward to aetting the solution into the hands of those that need it most 22:18 as soon as possible and that's for the team behind it 22:24 and we found a couple back in early 2016 originally building developing payment technology

to support the transition to a casual society we ended up out in the middle east partnered with visa and built mobile 22:36 wallet merchant point of sale and financial data solutions but towards late 2019 22:42 we decided to pivot the business away from the middle east away from payments and back closer to home however the 22:48 experience gained down in the world of payments has definitely you know allowed us to dive head in and kind of solve this 22:53 problem around financial uh vulnerability with with the experience we've gained thus far so we are coopel thanks for taking the 23:00 time uh sorry about those slides messing up uh i'd love for you to join us on our journey of strengthening the 23:05 financial health of the overstretched and vulnerable in society and 23:11 happy to leave things there move on to questions and really open the dialogue with anyone that's perhaps working in 23:16 financial well-being space or anyone that's keen to to learn a little bit more about what we're up to 23:21 thank you thanks craig i'll kick off whilst others 23:28 um come up with some questions um in terms of the the data that you 23:33 need in order to sort of provide these views and these nespec next best actions is do you see that the sort 23:40 of data data ecosystem in the in the uk and the the existence of open banking is sufficient 23:46 for the kind of metrics and information you require or is there something else that customers need to be able to put into the tools 23:54 or employers need to put into the tools to give that that fully rounded and fully informed picture 23:59 of the customer yeah no great question nick um for version one and certainly version you know two of what we have in the 24:05 roadmap absolutely the access to current account and credit card information that's really the crux of what our solution is 24:12 underpinned on to begin with but absolutely we want to be moving you know further into the direction of open finance so how can we

you know leverage and help you know users better manage their mortgage better understand loan products better understand pensions

24:25

and so you know with that there is still you know more work to be done within opening up that data ecosystem

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and there is ways and means to kind of you know you know build solutions around that but you know it's fair to say that

24:37

the ecosystem hasn't developed at the pace that the current accounting credit card ecosystem has developed uh when it comes to open

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banking so uh you know we're we're confident that you know whether it's through regulation or whether it's just innovation in that

24:49

space uh whether the the open banking platforms that have already connected 24:54

apis you know through current accounting credit cards whether they begin to kind of grow their uh portfolio into into other you know

25:01

financial product offerings then you know we can we can ride the wave with them but certainly for our for for the next couple of years in terms of

25:07

what we have planned we're we're comfortable what uh what we can capture through through data at the moment

25:12

thanks craig i've had a couple of questions about the role and interest of employers um ben asking for

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clarification and is this b2c or b2b to see and hoss asking um the level of interest that you've seen thus

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far from employers in this kind of innovation yeah i think you know looking at looking at what employers have done

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particularly with the last 12 months you know what there's been some great movements in terms of large employers taking more of a proactive role in terms of 25:36

employees well-being and you know whether that's through you know giving access to you know tools

25:41

like headspace or cam you know around the calmness element or whether it's you know running virtual yoga sessions these are all you know good steps in the 25:47

right direction but i think let's not beat around the bush here they're simply pain relievers rather

25:52

than identifying what the root cause is and i think that from what we've seen through the validation we'll be doing and with the pocs that we've got

coming up there's now a clear desire from employers to actually look at financial 26:04

well-being because they've now realized that the financial stress is actually what's causing the mental health issues

26:09

rather than just you know we can maybe get someone to come and you know maybe work through some you know some meditation techniques for

26:15

which maybe gives them a couple hours respite but never really tackles where the underlying problem exists so

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um you know that's certainly been positive so far and uh you know there has been you know i've got another slide

26:25

here that i was you know kind of prepared in terms of you know what we've seen right there is there is a couple of companies doing stuff when it comes to b2b 26:32

and you know salary finance has tried to kind of roll out initiatives to maybe give access for employees to get their salary maybe three four five days in 26:38

advance um you know you've got nudge you've got a lot of kind of b2b corporate clients that

26:44

they're sitting more on the kind of the financial education side they're giving you know users a little bit of kind of you know you know top tips to save on 26:50

your mortgage not really dialing on a on a unique individual you know customers finance

26:55

basis but there are there are initiatives and we have seen your strong engagement from employers with the likes of salary finance and nudge so

27:01

the appetite to do stuff around financial is there it's just that perhaps the tools haven't quite been

27:06

delivered in a way that they feel that can drive most value into their employees yet thank you i'm looking for a queue on how

27:13

we are on time um i will assume we have time for a quick answer to one more question

27:18

um what have you found to be some of the indicators of financial stress and vulnerability are there any lead

27:24

indicators i mean this may be your secret source so perhaps there's a risk in revealing it but anything you can share with us

27:29

about indicators of financial stress and vulnerability yeah so it's very interesting new um

julian touched on it earlier on identifying the vulnerability is actually one of the hardest part of the hardest things and the clear

27:41

you know on a clear high level it really does boil down to you know stable you know full-time 48-hour week

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or 40-hour contract versus gig economy that seems to be particularly through these kind of more volatile times

27:51

has been one you know clear clear indicator that you know someone may be at more risk of becoming a vulnerable

27:57

individual and it's not black and white and i think that's where it becomes a little more difficult and particularly what julian touched on in

28:03

the presentation earlier is identifying you know individual vulnerability touch points is 28:09

is so key to getting solutions like this into the hands of people that truly need it rather than people that are voluntarily

28:14

engaging with a solution it's actually reaching it getting into the hands of those who truly need it

28:20

craig thank you very much apologies for uh misintroducing you thanks for your time okay thanks next cheers and just a quick

28:26

one for me you know thank you also to teresa and toby i think the way they've run the sandbox being first class so thank you guys for all the work it's

28:33

good to hear thank you craig

28:40

stuck at home during the holidays my siblings and i would play monopoly for hours we followed all the rules to

28:46

the letter except the one that ended the game you see when unaffordable rents and 28:53

unforeseen costs inevitably resulted in you running out of money someone would slip you at 20 and the

29:00

bank would offer you a loan to buy king's cross station now we weren't

29:05

fiscal policy prodigies or game theory wizards it just seemed like running out of money

29:11

was a problem we could solve together why would we end the game when we could change the

29:18

rules to be less cruel we don't have to scroll very far to see evidence of cruelty in the uk

29:27 here the top one percent owns 25 of household wealth 20 pounds a week 29:34 is what half a million people call a lifeline while another half a million think of 29:40 the same amount and recall their favorite brunch line fifty percent of us are at real risk of 29:48 financial vulnerability and yet we accept organizations who care 29:54 little about vulnerability they have rules that say serve only who 29:59 can pay and value only what is priced 30:05 the best responders to financial vulnerability are not banks not the government not 30:11 by now pay later the best responders are our friends and family because they 30:18 are the ones who care about us when we're struggling to make ends meet 30:24 informal borrowing is fast convenient flexible and to people with low 30:30 or irregular incomes who are seen as too risky for our banks to lend to getting a loan 30:37 from a friend is a much more affordable option 30:42 but borrowing money from friends and family also comes with a distinct set of problems young people report feeling 30:50 uninformed and unclear about what's expected of them whether lending or borrowing they report 30:57 feeling uncomfortable and even unsafe 31:02 they avoid talking about money because they don't want to give the impression 31:07 that money is more important than friendship so people lose money and they lose 31:14 friends and it happens over and over again 31:19 because chronic financial stress creates chronic relationship stress 31:24 our support networks weaken our mental health suffers and those communities and 31:31 individuals that we don't serve or value find their financial 31:36 and social capital in long-term spiraling decline flank enables people who have 31:45 borrowed money from their friends or family to manage and repay their loans in a way

31:50 that's accountable and safe we work with young people on low incomes to build 31:56 confidence in themselves and confidence in each other we do this through features such as 32:01 a shared progress tracker and affordability monitoring and feedback and in-app messaging 32:09 growing trust is our guiding principle the key that unlocks compassionate 32:15 credit for communities that need it most to make an impact we need to take urgent 32:22 action in 2019 young people collectively paid 32:28 420 million pounds extra to access credit in formal markets 32:34 double what they paid in 2016. 32:39 but it's not enough just to remove an extra price tag we want to see people able to respond to 32:46 the needs of their friends building resilient safety nets and 32:51 sharing in long-term wealth the digital sandbox was a fantastic 32:57 opportunity for us to better understand our customers and the nature of informal borrowing 33:02 within communities we learned about our customers by using our ux work 33:08 to build hypotheses around their attributes and transaction patterns 33:13 and successfully validated about 80 of what we thought we knew we learned 33:19 about informal borrowing by identifying p2p transactions before asking which transactions were likely to 33:26 be in formal loans then we built a picture of community 33:31 around these transactions we brought these insights together to model the financial resilience of our 33:38 customers and deployed our model against some of the apis 33:44 throughout the process we met some amazing experts who are really excited by the work we're doing 33:49 and we're energized about where these discussions will lead there were also people that we didn't

quite get to and would love to meet you too our next step is to take our mvp into 34:03 development and secure the funding and feedback to fuel further learning 34:11 flanks innovation and insight is a source of optimism in the face of a problem 34:18 that not only hasn't been solved it hasn't been properly understood 34:23 and we think that's a great reason for you to support us thanks 34:32 cj thank you very much a uh an emotional and passionate pick and uh you've touched on a lot of um 34:38 really important societal issues i guess what i'd appreciate is if you could expand it more on what what you think 34:44 the solution looks like so you're giving us a sense of how you'll know the solutions working in terms of longer term resilience in terms 34:50 of less awkwardness but what what are some of the components of the solution that addresses this problem you talked about 34:56 an myp can you explain that a little bit more for us i can try to explain as 35:01 much as i'm as is not like currently under wraps because i think i'm fair enough so basically 35:08 the features that we've highlighted are basically a shared progress tracker where you can it's basically a shared 35:14 ledger where people can see where they stand on the loans that they owe each other which we think is super simple but actually 35:20 doesn't exist between people at the moment um we hear really funny stories from our 35:25 users where um people actually like in one case had a scroll on the back of their door 35:32 where people had ma where that person had marked their debts and the people that owe the money as 35:37 well um we also for example think it's really useful to have in-app messaging in a 35:44 platform like flank because communication is one of the biggest 35:49 problems that people generally encounter and that leads to avoidance and loss of friendship 35:56

and we think that strategically it makes sense to have something like an in-app messaging 36:01 platform um because we tend to have um really strict associations as consumers 36:07 about which communications need to happen where so for us it really makes sense that 36:13 that we need something like bespoke that would support people to to essentially like talk about a very hard subject for them 36:21 great thank you you've had some q a in the sidebar as well i'll pick a couple of them so a bit of 36:28 guestion some guestions about the extent to which there's data that shows um how regularly uh family and friends 36:35 actually do formally request repayment and whether that is something that occurs or whether most of these things do sort of lapse 36:40 you know is there a viable lending and repayment sort of market i guess to some extent it's probably where the question's going 36:46 and then a linked question from toby which is you know to what extent flank would play a role 36:52 in trying to facilitate that repayment or what role would it play in the event of nonrepayment so i guess 36:58 a little bit more on that if you could share some of your thoughts please yeah so what was really interesting that we 37:04 found in the sandbox um was there was a high degree of peer-to-peer transactions 37:09 um but in terms of the loans that we detected it was actually guite small um so that really went against the data 37:17 that we found through our ux research and through the ethnographic work that we've done 37:23 which really shows that these loans are happening at guite a high rate um and they're also happening at quite 37:29 large amounts um and the ability to kind of rely on these loans 37:35 actually really um really benefits people with low incomes or irregular incomes 37:40 and um it's something that actually people with high incomes can disproportionately take advantage of 37:46

for example i know a lot of people um are like a handful of people that have borrowed money from their parents 37:53 just to buy a car and they've been they've quite comfortably paid it back so that's a really different situation 37:58 from the situation that we're talking about where um people are borrowing money for groceries or borrowing money for bills 38:04 or rent um so i guess on to toby's guestion which is the extent um that flank would 38:11 play uh in the event of non-repayment so this is something that we've actually 38:16 gone really really close to our users to identify what they're using already in the event of non-repayment how could 38:23 we be better at our users how can we offer them services that they're not employing at the moment and 38:28 um the reality is that people are actually um not seeking repayment 38:34 because they don't know how to communicate um what they need out of repayment and people don't actually know 38:40 um other potential places in the community where they can get that support um so it tends to go from uh for example 38:49 that person hasn't repaid me um i'm not never gonna talk to them again or i'm only gonna talk to like 38:55 their father in order to get money back and then if that issue is big enough to litigate 39:00 over you'll even have someone visit visiting um you know small community law firms to see if they can 39:06 get the money back so this issue is um like seems really small but then it becomes 39:12 disproportionately large in terms of the problems that uh beset people that have to deal with them 39:19 lovely cj thank you um we've got more guestions but i'm afraid in the interest of fairness we're going to wrap it up 39:25 there um there is a really interesting question about how informal lending could uh be fed through to credit 39:30 ratings so if you could tackle that in the sidebar that would be really helpful and then also a couple of questions about whether 39:36

um informal borrowing should be promoted actually as a form of credit i won't give a view on that as a as a regulator 39:42 at this moment in time but thanks for your presentation and uh best of luck thank you 39:47 thanks nick okay uh every time we do a demo session there's always a couple of 39:52 teams that give me names that are hard to pronounce and the next one is one of those so i will do my best but i'm sure the presenters 39:58 will correct me um I affinity i believe we have up next over to you guys 40:09 so hi i'm mason ceo and founder of elephanty and i'm here with sabote co-founder and cdo so elephanty joined the sandbox 40:17 to prove that there was a better way to define financial aftercare for the masses 40:23 and improve financial well-being specifically focusing on the dead advice sector 40:29 and we've personally seen the impact of that from our own experiences as bankers 40:35 the problem is severe creditors are 18 billion pounds in earlier each year 40:43 and we've heard before from other speakers like 12 million people are estimated by the fca to be struggling 40:49 with debt the challenging statistic is that only one in six who need that advice 40:55 have accessed it and even more alarming is that off the 41:01 third of that only 38 say they have effectively reached debt resolution which is 3 and 50 41:09 of every person struggling with that and there is no guarantee that they 41:14 would stay out of debt in the long run 41:21 the impact of that on the economy is staggering 78 billion or four percent of gdp 41:29 according to joseph wrote round three according to the money charity about 59 billion in credit card debts and nine 41:36 million people have bordered more for essential during the cobit this means we could potentially see a 41:42 larger impact on households and the economy going forward 41:49 with clunky case management lack of capacity within the current industry we believe there is a better 41:54

way to do that advice in the 21st century 41:59 we've developed financial after care infrastructure as a service construct considering all 42:06 the stages of debt journey from pre-advice to quote posted by support 42:12 to bring better outcomes for individuals debt advisors and creditors 42:18 resolving that effectively and in a timely manner improving the debt advice journey to be 42:24 more engaging and efficient and reducing losses and improving the sector's visibility on real challenges 42:34 the fca and city of london have helped us clearly define and test our outcomes 42:40 tracking applications reducing debt advice life type life cycle time faster referrals and 42:46 turnaround and we have through this process 42:51 validated pre-populating the standard financial statement that can speed up the process dual app 42:59 ecosystem is important for engagement so validating that that's an important 43:04 aspect of the journey and that there is a huge untapped need within the industry 43:11 and i'd like to take this moment to thank the partners and mentors that have helped us during this process 43:19 i'd also like to thank the fc city of london because we are proud to announce a partnership with fair money advice together we are 43:26 excited to disrupt the financial advice space with a partner that is innovative and focused on better outcomes 43.37 i want you to imagine a future where people have improved access to support where there 43:43 is greater collaboration across the industry where experiences are better for 43:50 individuals debt advisors and creditors leading to financial resiliency and a stronger uk economy 44:01 again i'd just like to thank you for listening and for your support i have two asks 44:06 we are fundraising and would love to have you part of the elephant journey and we are looking for like-minded 44:13

partners dead advisors creditors banks collection agents who would like to be part of this journey 44:19 thank you very much and i'm happy to take questions 44:24 mason thank you very much and i'm pleased to see i didn't get the name completely wrong that's good to hear um i guess i had a guestion 44:31 around one of the things we often hear about in the resiliency space is also the issue of financial literacy 44:38 and i just wondered how you guys were thinking through the provision of advice and 44:45 information in a way that overcomes what we know to be a problem which is relatively low financial literacy generally in the uk so if you 44:52 guys been thinking about that and is there something about your solution that helps address that i guess that gap in 44:58 competence or knowledge thanks that's a great question and you know 45:03 you're absolutely like right literacy is a huge part of the problem as well on the consumer side and you know the 45:10 from our perspective that we are planning from a long-term uh delivery of our solution to include 45:17 within the consumer app financial literacy byte-sized 45:25 tools and information nuggets that help people better navigate through debt account 45:32 management financial management and so you know those are to come i can't talk too much about how we're 45:37 planning to deliver that but you'll see that hopefully coming out within the next year 45:44 thank you um interesting question from chris about those that are not i guess mobile connected currently and 45:51 whether you have looked into uh how to cross that digital divide or how to provide these sorts of services 45:57 to those that are not quite included in that way at the moment yeah absolutely i mean you know from our 46:03 research um from our target market about 70 of people have access to smartphones of 46:09 the 30 who don't have access we have um actually looked into uh providing nondigital

46:16 solutions and so we're in talks with some charities to think about potential future of 46:21 looking at uh providing mobile solutions um so mobile devices 46:27 with plans and elementy app and other um you know challenger banks 46:34 all bundled up as a service for for those individuals and of course there should be some 46:39 training etc also involved but that's again a future plan for the immediate 46:45 future we want to solve the capacity issues within the debt device space which which really 46:50 needs resolution thank you and then a question from uh you vouch if 46:57 you could bring this alive a bit for us what do you think good financial after care actually looks like 47:02 what would consumers experience can you give us a couple of examples absolutely so i mean if you think about 47:08 a consumer journey itself right i mean the for most people you know it hits 47:13 them hard and you know there's some shame factor involved with with accessing debt advice for example or 47:21 even going to people with with a request for support and so um what we're planning to do within this 47:28 is is first of all to tackle the pre-advice space where you know there's a lot of identifying 47:33 happening on on key factors that potentially could put them in difficult situations and try to avoid those 47:40 before their credit scores or you know that their debt takes a hit in the advice space itself 47:47 it's about automating and accelerating you know the journey itself if you think 47:52 about from an existing debt advice journey an individual will get connected to a debt advisor 47:58 who will then set up an appointment and go through and build a standard financial statement and this 48:04 process can take weeks and so what we're trying to do is reduce that to days uh if not minutes and then try to go to

the next stage which is looking at you know the advice part of what they can do and then connecting to the

48:18

creditors which can take several weeks as well and what we're trying to do is reduce that time

48:23

on the other side to be within days or minutes as well and so hopefully what you will 48:30

see is a better experience from a customer's point of view a person who's seeking their device first of all

48:35

trying to not get them into their device and if they do get into that space where they need that advice connecting them

48:41

quickly getting them the right advice being able to move to a different debt advisor without losing

48:46

any traction and then also connecting with creditors in a meaningful way for resolution and from a creditor's

48:52

viewpoint it's about ensuring that they are receiving you know

48:57

clarity and visibility through the entire process and also having better recoveries you 49:02

know if they have the if they have better data on the affordability and what's happening within their customers uh accounts etc

49:10

you know i'm sure that they would be more willing to see that for example giving breathing space and other aspects

49:16

of regulation that's come into play would be easier for them to decide for which customers which one

49:21

which aspect of that advice or which aspect of that resolution is is best 49:29

so i hope that answers that question indeed thank you very much uh there is a question from toby in the

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sidebar if i could ask you to take a look at that after this but unfortunately we've run out of time one thing i was going to reference

49:40

so you um you talked about stigma of debt and it just strikes me we haven't yet 49:46

normalized the conversation about debt in this country we made really good progress on things like mental health and

49:51

patrons of mental health that have come out and said let's talk about this let's we all experience this i'm struggling

49:57

beyond the martin luther of this world to think of people that kind of come out and evangelize the need for this 50:05 discussion so i think that whole point around stigma is a really interesting one so thanks for raising that as well 50:10 um thanks for presentation mason thank you okay next up uh we have an entity by the 50:17 name of automated regulatory reporting or arm although i do think that acronym might have gone 50:22 already so we might we might need another abbreviation but over to you guys thank vou 50:33 my name is ignacio and i'm the ceo of automated regulatory monitoring to give 50:39 you a little bit of background about our platform we have developed a platform 50:44 that automates compliance and quality assurance monitoring for financial institutions 50:52 so dealing with vulnerability adds complexity to how companies should treat their customers 50:58 it impacts companies across different industries products within the same company and 51:04 even how these companies should treat their customers and digitalization will make it even 51:11 harder because companies will lose proximity to the consume to the customer so over the years that 51:19 i've been working in the fi in financial institutions monitoring compliance 51:25 i have realized that most of their controls are manual and 50 of the time is spent on manual 51:32 tasks also their controls are based on random samples 51:37 that missed issues as simple as sending periodic notifications and finally it take days or even 51:45 weeks to identify the entire population of customers impacted 51:52 so we have built a platform that oversees the entire portfolio daily 51:59 to identify those potentially vulnerable customers that are not treated with the appropriate levels of care 52:07

we use different available data sources to identify vulnerable customers 52:12 and data analytics and artificial intelligence to identify signs or potential signs 52:19 of vulnerability that will go unnoticed otherwise to give you an example uh 52:25 for instance a typical expenditure trends so we classify those signs of 52:31 vulnerability into different characteristics and monitor the customer journey 52:38 depending on each individual characteristic 52:43 so let's pretend we are having our early morning coffee and we have to 52:49 oversee our portfolio using arn's platform 52:54 so we have a high level overview of the portfolio where we can see the 53:00 vulnerable customers identified how it changed over time to see if our performance keeps improving 53:07 or we keep identifying different vulnerable customers we identify 11 vulnerability 53:14 characteristics also we're focusing on financial difficulty based on the data 53:19 that has been shared during the digital sandbox and we can look at the portfolio to gain 53:26 some insights so to give you an example it seems that in this case most of our vulnerable customers are in 53:32 furlough so it seems this should be a temporary shock and finally we can see different key 53:39 actions that should be taken and those actions that are at risk 53:45 ideally cases at risk should be at zero and to give you an example we have 53:52 identified more than 70 flags that can be activated across different companies 53:58 we can always filter and look for other reports and go to the detail and see 54:06 all the details about vulnerable customers even we can filter to look for those customers in 54:12 furlough and send this report to the appropriate areas to start investigations 54:19 we can also look at the cases at risk we have this number of cases at risk 54:25

today we can take a look at trends to make sure our performance keeps improving and even look at the 54:32 different flags that we have identified more importantly we include how long 54:38 these flags have been activated to maybe prioritize those we that have been there for the longest 54:45 period of time and again we can always go to the detailed reports 54:52 and send these reports to the areas that should start the investigation 54:59 so after all the years of experience of our team and after several 55:05 conversations with more than 20 financial institutions we wanted to keep looking at the industry to validate 55:12 our flags so we took a look at the fca's final notice to barclays 55:18 and we identified at least 22 compliance related flags that would have been identified by arn 55:27 giving a full overview of the performance 55:32 progress saving millions of pounds in auditors and internal manual reviews 55:39 and preventing the impact on several millions of customers 55:46 and remember all that just while enjoying our early morning coffee 55:53 so we're looking for financial institutions that would like to or that will be interested in our 55:59 platform to either perform policy and procedures gap analysis portfolio auditing or even to monitor 56:06 continuously their portfolio of customers thank you 56:14 vanessa thank you um i had one question and there's one in the queue as couple in the q a i guess um my first was you've given us 56:21 a really good overview of how the platform and the tool identifies risks um do you think there's 56:28 enough clarity on what the actions and the mitigations and the next best actions that ought to be taken are 56:34 or is there is there a sort of a further limb of the platform to develop that that part of the feature or that 56:40

functionality so uh well they're like you we identify two types of flags uh some flags 56:48 are rules that we have mapped uh through the regula regulations and that should be clear cut 56:55 you should take those actions then we have mapped a lot of guidelines 57:00 trading bodies studies and best industries and industry standards to come up with 57:07 some guidelines to provide to potential customers those guidelines are just 57:15 you know like a support for these companies to make sure that 57:20 they are following the industry best standards and also we can actually modify 57:27 them to adapt to the the the company's uh 57:33 risk aversion okay thank you that's helpful um there's 57:38 a couple of questions that relate to disclosure of vulnerability characteristics 57:44 by customers and whether your platform requires that they sort of self-declare certain issues be 57:51 that furlough be that you know distressed income whatever it might be but does it is it relying on those 57:56 notifications from customers or is it extrapolating that event or that risk 58:02 from the data sorry that will explain that very clearly no no i think that yeah you explain it uh good 58:08 so again there will be two cases there will be financial firms should 58:14 record certain information that has been provided by the customers so yeah in certain cases we take 58:21 information that has been provided by the customer in some other cases like expenditure 58:27 trends customers in furlough or distressed income we have a machine learning module and 58:34 predefined rules to identify those cases okay great and then the other point and 58:41 we saw this we ran a tech sprint on uh mental health and uh one of the 58:46 things that we saw in that sprint and one of the questions relates to this is there are certain scenarios where systems will detect 58:54

certain types of vulnerability that may not have been disclosed by the customer and it may be a mental health 58:59 issue or a capacity to make decision type issue but then it throws up all sorts of 59:05 complex moral and ethical questions about how does the firm engage with that and how does how does a 59:10 firm notify a customer that they might have spotted this issue have you guys been thinking about those sorts of things i 59:16 know you said obviously the data asset was very much focused on financial resilience were there other sorts of 59:21 vulnerabilities that you've been thinking about well the demo is focusing on financial difficulties but 59:27 we take into account other vulnerability characteristics and actually um 59:33 during the demo uh sorry during the pilot uh one of the questions was exactly that 59:39 so we're going to compile certain information that might be a little bit intrusive on the personal life of your customers 59:47 um so that's like the approach should be outside arms uh 59:53 scope but i think the best advice that we got from the money and mental health insti 1:00:00 policy institute is to ask open questions be or turn uh the 1:00:07 situation into positive so uh instead of saying um okay it seems that 1:00:12 you have mental health issues you can always say we have additional information if vou 1:00:18 have any problem or you're finding some issues in your personal circumstances 1:00:25 or even submit notifications about uh other types of support because mental 1:00:31 people with mental health issues apparently they have a hard time explaining their situation by phone 1:00:37 so sometimes it's even better to provide the information through different uh channels 1:00:45 ignacio thank you very much automated regulatory monitoring is the team name there are a couple of 1:00:50 questions in the sidebar as well if you wouldn't mind turning your attention to those when you have a moment but thank you for your demonstration

1:00:56 and the q a thank you next up we are approximately halfway i 1:01:02 think that's the fifth demonstration next up is a group called 1:01:08 amplify so good morning my name is minaj patel 1:01:14 i'm ceo and founder of amplifyglobal thank you very much for your time this morning 1:01:21 as well as thank you very much for the sandbox team for putting on the summer the event today and also for the last 1:01:28 two months and the help they've given us so amplify is an innovation we help 1:01:34 internal legal teams uh simplify the language or their legal documents 1:01:39 we help customers better engage with complex information we assess the level of understanding and 1:01:45 risks associated with that and we provide audible mi data so management information data 1.01.52for compliance weaknesses potential sources of complaints and enable a firm to provide a better 1:01:58 duty of care to their customers so we came into the sandbox with three 1:02:04 kind of very specific objectives and the specific case identified for our 1:02:10 participation sandbox was focused on the self-service solution that sits between sits within the 1:02:16 intervention to prevention space and provided dynamic digital solution to 1:02:21 more effectively engaged customers as part of the collections process both for the private and public sector 1:02:27 related uh debt collection at a level of complexity they are best able to understand and 1:02:34 assessing their comprehension of the information presented to them um so first of all our first objective was to 1:02:41 utilize the data sets that were made available to help develop and test our engine 1:02:46 secondly we wanted to reach out to organizations within the sandbox as well as stakeholders and look at 1:02:51 potential collaboration and thirdly we wanted to receive feedback on the amplify process

1:02:58

as well as gain insights to the challenges faced by firms and so how did we utilize the

1:03:04

resources within the sandbox we deep dived into the data sets so this included the synthetic data sets

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as well as other transactional data sets and sme data sets we engage with other 1:03:18

innovators within our cohort um including um a number of um

1:03:25

innovators that where we've got live conversations going and seeing if there is a future opportunity to collaborate and we also reached out

1:03:33

to a number of mentors who provided the expertise to help with our product development

1:03:38

such as money mental health policy institute now our primary objective was around data sets

1:03:45

um and unfortunately we found some limitations within the data sets i mean 1:03:52

synthetic data only goes so far and we needed to have access to data sets that showed real spending

1:04:00

that had vulnerability markers as well as combining vulnerability markers with 1:04:06

spending habits and ultimately providing a single view of customers and 1:04:12

i should note and say big thank you to the sandbox team because we went back to the sandbox team

1:04:17

with a long list of other different types of data sets that we know have been used in other different types of competitions

1:04:23

and when developed by other entities and they tried their hardest in trying to source these data sets so thank you very

1:04:29

much and we really appreciated the effort that you went through um so how did we overcome these

1:04:36

um challenges so first of all we went back to the synthetic data set um and we stripped back the synthetic

1:04:44

data set and augmented this with additional transactional information from other data sets

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we identified vulnerability markers from research papers such as the fca occasional paper

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as well as papers from their money mental health policy institutes we then layered the markers down onto 1:05:03 the original synthetic data set and this enabled us to create a secondary 1:05:09 synthetic data set which we were then able to use um so what are our achievements um i can 1:05:16 see first of all our biggest achievement was the challenging data sets 1:05:22 and it made us think about our methodology um and with us not being able to have the right type of data sets we wanted we 1:05:28 had to deconstruct the process and reconstruct it um which 1:05:34 kind of gave us a guite a insightful insight um and unique insight into other data 1:05:40 sets that we could possibly use um and we now have a baseline model which we can involve as we further 1:05:46 develop the amplifier engine and we've built strategic partnerships and we talked to step change about 1:05:51 collaborating on a number of work streams um and finally being in the sandbox has enhanced our reputation 1:05:58 built credibility and open doors for us so what are the next steps well in 1:06:06 parallel to being in the fca digital sidewalks we are also in the law tech legal sandbox and the fca sandbox has given us a 1:06:12 really strong foundation where we can take our learning and our baseline model into the legal law tech sandbox and 1:06:20 we're building a significant corpus of legal information to help develop our nlp engine 1:06:25 um and we've been approached by telco joints who have given us over 200 contracts so this 1:06:32 kind of shows the breadth of use cases that we can use our engine to um and we're looking to bring in firms 1:06:39 into these work streams and so we're developing our novel engine and we're looking to launch pocs and 1:06:46 pilots at the end of march and looking to deploy amplify um in that environment with a focus on consumer 1:06:53 credits and the debt collection space with our partners that include equifax 1:06:58

and their sister company tdx and in desa um and finally and thinking 1:07:04 in april we will be publishing your report focusing um on the phone's legal or regulatory 1:07:10 obligation to the customer in identifying vulnerability and also some specific legal questions 1:07:16 concerning the legal purposes of uh teasing c's and their role in informing the customer 1:07:22 the legal extent to which legal texts can be simplified and retain their integrity we are working with michikom de reye on 1:07:29 the report and we we will be informed by our workshops with regulators trade associations and data and ai 1:07:35 experts institutions as part of our work stream in the low tech legal sandbox thank vou 1:07:40 very much um for your time and thank you again to the sandbox team for this opportunity 1:07:48 thank you for your presentation and for sharing uh the good the bad and the ugly of your experience in the in the sandbox 1:07:53 and the bits the limitations and challenges you faced as helpful for us as we think about how to develop this 1:07:59 this further i quess i had a question about what what you thought a sort of simplified terms and conditions might 1:08:04 look like so we you know this has been a proverb a long-standing issue in financial markets and in the legal profession 1:08:10 generally this balance between disclosure clarity transparency brevity 1:08:18 and it sounds like you're developing an nlp engine to help come up with a more simplified 1:08:23 uh appropriate form of disclosure can you share anything on what you think that would look like and 1:08:29 then the characteristics i want to share the technical process as to how we're doing because that is very novel um 1:08:36 but what i can share is that um you know i'm a marketer and being a marketer my number one 1.08.41priority is to make it to engage with people and to customers um who whoever i'm

1:08:47

i'm sending that information to so therefore if we present information that people do not understand it doesn't matter how many 1:08:53 times go back to that individual with different ways of presenting the same information that person is not going to engage with it 1:08:59 so first and foremost you need to make that information understandable but obviously within the parameters within the legal and so we 1:09:07 so we're working very kind of closely to see well how far can we simplify the language before it loses its legal 1:09:12 contacts um so that's first off secondly you have to put them through a quite unique 1:09:18 put them through a user experience and interface that they're more kind to that and and so therefore you know as 1:09:26 people have mentioned previously you know bite size information um but also what we're doing is we're layering 1:09:32 that up with multiple other different functionality so and thirdly you know 1:09:38 people need a reference point yeah i've been looking for api's information about my credit my 1:09:46 credit card accounts and it and you won't believe how long it took me just to find simple 1:09:51 information that i needed to find um and what we're doing is actually making 1:09:57 um a hub which has a reference point so the individual can go back in and 1:10:02 access that information so it's about kind of looking at it looking at the whole kind 1:10:07 of process bringing the teas and sees to life and it's not just there as as a one-stop 1:10:13 shop at the start of uh onboarding journey it's there for the whole duration because uh what we want to do is is is 1:10:21 use that t's and c's as a reference points and those tcc's will change over time because if you miss payments 1:10:27 you could have full go and have a payment holiday uh interest rates changes etc etc SO 1:10:33 therefore the individual customer in some ways needs to know and be what 1:10:41 the account information is and how that is changing as well and we're presenting that to them and

1:10:46

giving them the opportunity of the accessing that thank you we're running short on time i

1:10:52

appreciate i asked a very long question there is a question from chris in the side about the fact that a lot of vulnerable people

1:10:59

are themselves not that familiar with the extent of the digital footprint they're creating and the the amount of data that is being mined

1:11:06

about them and yet a lot of these solutions rely on access to and utilization of that data

1:11:12

so how do you think through the kind of the consent issues and the informing the customer they understand

1:11:17

that's a very good question and one of the pillars of amplify is that we are being very transparent

1:11:22

and we will have a consent um and the privacy notice hub within the um within our main uh um section

1:11:30

and this is where the individual is and it will be able to access all the different types of data that we're holding on them

1:11:36

um and and have control over that data and we are very upfront this is we are monitoring this data

1:11:43

we're capturing this data to to provide a better service to that individual and then also on the flip side for the

1:11:49

lenders giving them an intelligent audit trail to start intersecting and feeding bits of information just to

1:11:56

ensure that you know we are we need to ultimately be trying to increase that level of financial literacy

1:12:02

uh for the consumer side but also give the lenders the tools necessary to be able to do that yes thank you very much

1:12:10

for your uh discussion good luck with the painted discussions as well and uh thanks for talking to us today

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appreciate it next up is portable

1:12:24

uh there's been some big stats thrown around already this morning and here's another one for you our interest is holy and solely in the 1:12:30

future of work and how that's going to unfold and impact society and the headline stat here

1:12:37

is you know 50 of the world's workforce are soon to be if not already working 1:12:43 independently in some shape or form independent freelance a gig consulting

1:12:49

contingent flexible you know this is a big headline statistic 1:12:55

uh and we're thinking about vulnerable consumers the impact of work you know it's a hard connection into

1:13:01

that vulnerability so 50 of the world's workforce are working outside of the typical 1:13:08

normal supported employment structures of the old world and who are the people 1:13:14

that are living and working as part of this freelance or gig economy if you like well it's everyone and it's happening

1:13:21

now from millennials to baby boomers everyone in between across all walks of 1:13:26

life all shapes and sizes by default you know we are all now

1:13:31

living and working in this freelance and this gig economy

1:13:37

and let me share with you an insider's secret and your first hashtag opportunity today 1:13:43

for those social media aficionados you know this gig is big to the tune of 1.3 1:13:50

trillion us dollars at a global level as i said it's a global market phenomenon 1:13:56

and a fundamental shift really in the way we are choosing to all work and by default live and that's an

1:14:03

important characteristic and distinction as well once upon a time freelancing independent work wasn't by choice um it was forced upon

1:14:11

people but more and more that force is still there and no doubt coped is going to accelerate that

1:14:17

but by choice now people are demanding this sort of independent free way of working and living

1:14:26

and who are the people and that 50 that we're talking about where are they placed how are they going

1:14:34

well for them the risk is even bigger because a staggering 74 1:14:39

of them are either uninsured or chronically underinsured and just focusing on insurance here

1:14:46

by default facing huge family and financial risk every single day

1:14:52

so i'm mike minet the founder and ceo of portable clearly smiling there so that was pre-covered team photo

1:14:58

and we're all about driving shift and understanding into this new paradigm 1:15:04

and fundamentally this is the problem as i said when you've been that full-time employee you've got everything provided for you

1:15:11

something happens to you your family support structures kick in services are made available

1:15:18

and it's all designed to look after you to keep you happy healthy and productive the day you go out on your own or you

1:15:24

start out on your own you've got absolutely nothing and you have to start thinking about and putting some of these things back into

1:15:31

place some do most don't head in the sand hoping it's all going to go away deciding to run the risk the second

1:15:38

factor here is uh when you've been that full-time employee your underwriting score sits

1:15:43

here and your credit score is here the day you go out on your own or start out on your own your underwriting drops

1:15:49

and your credit drops for no good reason except that you are now independent and these are the sorts of dynamics that

1:15:54

we're looking to explore into challenge how we're doing that we've developed 1:16:00

what we think is the world's first uh risk score um it's been liking to the universal credit score for the

1:16:06

freelancing gig economy we're calling it frisk freelancer risk and that's what brought us to the sandbox opportunity

1:16:14

as i said we're on this mission to support the vulnerable workforce and those who are exposed without the safety net and structures of

1:16:21

traditional employment um be it benefits access to cover

1:16:26

favorable terms from you know your banking or your credit facilities or stuff that works for you in this

1:16:31

flexible day and age we came to the sandbox this is what we

1:16:37

started with we had an idea and that was about it even worse than that you know it was a blank piece of

1:16:43

paper around that idea so for us it was a great opportunity to get going and to really 1:16:49

start thinking a little bit further a little bit deeper we wanted to utilize like everyone the 1:16:54

available data sets to start extracting um some data and analytics and 1:16:59

intelligence across the sort of the standard issue risk metrics if you like but also what's being touched on today

1:17:06

and we think it's also important are these behavioral and social sort of uh dimensions that we'd like to bring

1:17:12

into it um you know we're wanting to get away from those things that force the computer to say no uh in our

1:17:20

world the world of work independent workers behavioral characteristics there's some positive

1:17:25

things going on there be resilient or tenacious or trying to you know have to hustle to find work to keep

1:17:31

work and some of these personal characteristics can be quite favorable and even when matched up against the

1:17:37

traditional sort of more secure employee as i said we started with nothing and we 1:17:44

got busy there's terms on this page and bits and pieces that i don't understand uh being old school but we've had some

1:17:51

bright young people uh really utilizing the tool sets the information synthetic data data made available and

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at the end of it we've come up with our draft model so we've gone from a blank piece of paper to a draft model and for

1:18:04

us that's fantastic it's actually inspired us now to push on as i said we're 100 1:18:10

focused on developing that understanding of both the good and the bad risk that comes with being a freelancer

1:18:20

frisk is the score that sits at the heart of the platform that we're building everything we're doing is designed to

1:18:25

empower that independent workers so i feel like we're looking to to take back challenge the old world

1:18:31

present this new risk score and um and work in partnership with the 1:18:37

sort of the insurance companies and the financial services providers to truly understand that independent 1:18:43 worker risk and by doing so it ultimately benefits the individual their family and 1:18:48 society has a whole more inclusive more social mobility less precarious situations uh is better 1:18:56 for all of us uh our asks of today there you go we're an early stage startup 1:19:02 we're always raising and we are uh just kicked off our second raise we're interested in working with um 1:19:09 financial partners who understand and believe in this future of work concept and the way to do things better and differently also now 1:19:17 we're encouraged by our early findings we want to push on proof of concept pilot partners looking to collaborate further with this 1:19:24 understanding of the risks both good and bad that the freelance economy the geek economy is presenting 1:19:29 to us all and already today i've heard there's probably some friendly freelancer friendly if you like products and 1:19:35 services that are in development uh if you've got stuff in development or stuff that existing 1:19:40 as i said we're building this platform and ecosystem all designed to support that independent worker 1:19:46 to live more freely safely happily and ultimately our mission is to enable 1:19:51 people to sleep better at night no need to remind you this gig is big 1:19:58 and we are portable uh thank you for today thank you to toby and teresa for keeping us accountable 1:20:05 to the ecosystem for checking in on how we're going and offering their help and support and hopefully it's not over we look 1:20:12 forward to collaborating as i said further and um and helping each other out thank you 1:20:19 mike thank you very much from champion orange to hot pink a real a real colorful presentation so 1:20:25 thanks for that um i guess but my question was around you know the development of the new 1:20:30

credit score or a new a risk score sorry not credit score and you risk score and how you build uh a community that 1:20:38 trusts in the accuracy and the validity of that of that score just any of your thoughts 1:20:43 about how you'll take that piece forward um well absolutely noted in one trust is 1:20:48 probably our most important pillar that um we need to establish uh so how do we 1:20:54 do that i think um our approach is we're just putting that individual at the heart 1:21:00 establishing the understanding the rich understanding of the way that they think in the ways they go about it 1:21:06 and then you know the ambition is for that understanding to be shared back to 1:21:12 all the constituents interested parts um it's not to challenge industry or to 1:21:19 tell them off but it's actually to take i'll say poorly understood risk and present it back 1:21:24 as much better risk than what they first thought so therefore it's good for them to get access to um 1:21:31 better risk it's highly fragmented so that's where the understanding often falls over 1:21:36 so being able to take that consolidated view is actually helpful to industry and creates for more efficient win-win uh it's actually 1:21:43 we've got three wins win for the individual win for industry and a win for for the wider societv but 1:21:49 trust is um is integral uh you know and i'm going to say it's a 1:21:54 work in progress to how we how we establish and and maintain 1:22:00 uh trust thanks i had another question actually 1:22:06 around i mean you spoke early on about how um so how important employers are in um 1:22:14 providing an elevated risk score or you know a beneficial risk or an underwriting 1:22:21 scenario and a risk scenario for colleagues and i just wondered how many 1:22:26 people realized that to be blunt like how many people actually understand that it isn't just where i pay my credit card 1:22:32 on time it isn't just my actions it's also some of these safety nets that are built around me because of my employed 1:22:37

status and i've probably banged on this about this quite a bit already today but this this question of literacy and 1:22:42 understanding like a what do i impact but also what are the things i'm benefiting from around me 1:22:48 and i think we disentangle some of that and bring some of that to life for individuals well the big discovery 1:22:54 is for those who've been in full-time employment all these things that i've made available and provided to them 1:23:00 are often taken for granted um not considered um and until such time as one that 1:23:08 they're called upon which isn't that often necessarily or on their own and realize hang on a 1:23:14 minute you know i had things like critical illness or income protection uh life insurance access to benefits 1:23:21 with health and dental that my company used to provide for me uh how do i go about now finding finding 1:23:27 out what i've got to do to get after it then the second layer to that is well 1:23:32 in the old world the company benefited from what they call group risk so they're able to get group buying power 1:23:38 if you like in this new world when individuals go out and try and sort this stuff they're being penalized they're facing 1:23:44 penalty and certainly on a pricing they're now paying one-to-one pricing at a high street level so you know 1:23:50 the same thing it actually falls back there's a win-win-win um for the organizations who are either 1:23:57 employing or have access to well-supported uh either full-time 1:24:02 employees or contracting and contingent because at the end of the day the happy and 1:24:07 healthy the individual can be the more productive they can be which which provides benefit in that sort of 1:24:12 circular circular way thank you mike i'm sorry i ask questions because 1:24:19 they're a bit slow to come they have now come but we're now at the time so i'm going to ask you to pick up the questions on the side i also 1:24:25

ask all the attendees get your questions in early because i will fill the space but you'll probably have better questions than me mike thanks for your 1:24:31 presentation and good luck with the tan take care 1:24:37 okay next up we have applied block chain 1:24:45 my name is addie bernary i'm the founder and ceo of apply blockchain and i'm going to present to you a 1:24:50 product that we're launching called silent data 1:24:58 so we've heard today a number of different approaches uh to dealing with vulnerable consumers 1:25:04 um and the area that we focus on it's guite interesting actually to see how everybody looks at it from a slightly different angle of how they can help 1:25:10 the area that we're focused on is data and actually the fact that the data 1:25:15 representing these people is actually very sensitive and transferring and transmitting and 1:25:20 showing that data is is in itself an issue um so when when when vulnerable consumers are 1:25:27 being assessed for credit we really need to think and maybe rethink about how that information is shared and whether it should be shared 1:25:34 in the first place um so why not share data well 1:25:41 those of you who who watch the news will be aware that every week there is a 1:25:46 another breach of uh of one corporate or another so millions of records are stolen the 1:25:54 data's surfaced on the dark web it's used by criminals for identity fraud and there's actually a separate stream of 1:26:00 work in this fca sandbox to to look purely at the cyber issues 1:26:06 but we're thinking about this in in in terms of the um the vulnerable consumers and how they can be dealt with 1:26:13 um so what's the problem the problem is also related to open banking so open banking is an interesting and 1:26:20 fantastic initiative which the uk is leading in which as we've heard from some of the 1:26:25 other participants here allows inspection and sharing of banking

1:26:31 data so it was obviously introduced to to create more innovation and more competition which 1:26:38 looking at the companies today and all the other companies using open data we can see that that's that's really starting to happen now 1:26:48 um an open banking as we've seen here as well can be used to assess affordability which is a fantastic use case because it 1:26:55 goes beyond the existing credit checks that we have today and looks at other aspects of of individuals and allows people to be 1:27:01 assessed beyond um the the payment defaults that they might have in their history in 1:27:06 historical data the problem is that open banking opens the floodgates to data sharing 1:27:14 so what we're really doing is we're creating a tunnel into an individual or company's banking data 1:27:19 and that's a lot of sensitive data that's potentially being shared 1:27:25 so what's the solution to this so we've created a platform called silent data which we believe addresses 1:27:30the best of both worlds so the platform provides privacy preserving open banking and what we mean by that is 1:27:38 that we can undertake assessments on open banking data 1:27:43 without actually having access to the data ourselves and without it being exposed in any way 1:27:49 and we believe that for vulnerable consumers this will help protect their data um and and protect it from theft and so 1:27:55 on uh and potentially increase the lending to that to those types of consumers who might 1:28:01 then be more willing to uh to have checks performed on them um the plat the platform itself offers at 1:28:07 the moment we just launched and it offers two types of checks the first is approve of funds so proving that 1:28:13 the balance in the account is above a certain level and proof of income so proving that there's a this three 1.28.18

months track record of income above a certain level um and the way it works is the request 1:28:25 is sent out by email and the consumers or businesses you can also use this 1:28:30 to check businesses uh can click through and run an open banking check and the 1:28:36 extra uh secret source here if you like is the the silent data bit in the middle which ensures that the open banking data 1:28:42 is never revealed it's not even revealed to us so it's all stored in a and processed in a confidential hardware secured enclave 1:28:49and this solution has now been while we've been through the sandbox has been ratified by one of the largest security auditors 1:28:56 in the world a company called kodelski security and what's produced at the end of the 1:29:01 process uh is a certificate and the certificate is a digital certificate that can be independently 1:29:07 verified and the certificate proves that the individual or the company has 1:29:12 a balance over a certain level or income above a certain level and it reveals nothing else about the underlying data 1:29:17 but the digital proof the cryptographic proof is all in there so it proves that that the data actually 1:29:23 came from the bank and that the check was performed on on this person's or this company's own data 1:29:28 and that the check was performed privately and it couldn't have been revealed and so on so it's a new type of digital 1:29:33 certificate that has all of those checks in place without requiring access to the data 1:29:39 and the great news is that as of today we're pleased to announce that this application is live 1:29:45 so you can actually go to the silent data website try it out for yourself you'll be one of the first we'd love to get some feedback and you 1:29:52 can run your own you can test checks with banks account bank accounts and see how this actually works for yourself 1:29:59 we've been very pleased to be incorporated in the fca sandbox um we uh one of our one of our goals is 1:30:07

really to see how we could utilize the synthetic data uh to to try and add to the basic checks that we have in 1:30:13 place at the moment um unfortunately we didn't really get much value from it 1:30:19 and the main reason is that open banking data was was useful in its own right but we wanted to understand whether 1:30:26 checks on the open banking data co how they correlate to consumer behavior so 1:30:31 if we think that somebody has a an income over a certain level then that's that shows good good behavior um how 1:30:38 well does that call rate colorate with a correlate with loan repayment and unfortunately there wasn't any 1:30:44 correlation or there wasn't the correlation that we required in the synthetic data sets so we couldn't test 1:30:49 this hypothesis so the lack of mapping was a bit of a hindrance for us um but obviously this is uh this is the 1:30:55 first sandbox and and it i guess it's one of the things that would be useful for companies like us is to have more correlation across those data sets 1:31:02 in the future the real value for us out of this program was the mentors and here's a 1:31:08 list of some of the mentors that we spoke to and they were all fantastic 1:31:14 conversations that have led to changes in the product and changes in our approach to the market 1:31:19 uh shout out in particular to uh davao who had a really long conversation with 1:31:25 john ho and denise who provided i had two long conversations with and provided some 1.31.31fantastic feedback and ideas in particular in how this could be used to help fraud 1:31:36 and over here on the left you can see some of the ideas that have been developed on the back of those conversations 1:31:42 it's a fantastic partnerships and and feedback there and the other angle 1:31:48 is regulation so we're going to apply to be uh for aisp authorization and we're going to liaise with the fca to 1:31:54 make sure that the current regulation doesn't force us to take hold of uh and access data that we wouldn't otherwise 1:32:01

need to uh so we're gonna hi adi i'm sorry to interrupt it's just a time check 1:32:06 for you yeah okay thank you i'm just finishing up last slide uh so so basically we want to help the 1:32:12 uk and london to lay the foundations to lead in privacy preserving open banking and we have we think we have all the 1:32:18 infrastructure in place to help do that and we look forward to partnering with others thank you very much 1:32:28 addie thanks very much uh privacy for developing open banking i like the sound of that um 1:32:33 and it built i mean it builds on a theme that we looked at last year looking at privacy enhancing technologies generally and their role in 1:32:39 secure data exchange um you spoke about a couple of the early use cases proof of funds proof of income 1:32:45 where do you see this going beyond that what are what other opportunities are there or are they the 1:32:51 two core use cases for this sort of solution yeah so actually from the conversations we had of the mentors that opened up a 1:32:57 few other avenues to explore as well um including around fraud 1:33:02 and some of the requirements in place to uh to prove source of funds so 1:33:08 for example we could um ask for proof of for individual transactions without us 1:33:15 or anyone else seeing the rest of the transactions so seeing where specific money has cut or where money has come 1:33:21 from without necessarily opening up the whole um bank account 1.33.27um that that that's one area um the other area is uh is i guess beyond the 1:33:32 stream we've been looking at here is is business stability so you know the risk that companies have working with 1:33:39 other businesses who may not pay them or who may not be good for payment so the ability to regularly check your 1:33:45 counterparts and manage your own risk and in a way that your counterparts don't have to 1:33:50 start opening up their all their sensitive commercial data as well so beyond consumers we're seeing

1:33:57

business applications here as well thank you a couple of more technical 1:34:02

questions i guess um carson's asked one about how this compares to ing's zero knowledge range proof i think is

1:34:09

that krd um but also one of the things when we've looked at some of these privacy enhancing technologies before has been

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scaling challenges uh limitations on how hyperscale you can run these sorts of 1:34:22

infrastructures given the current state of development of the hardware and some of the enabling software

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can you answer either those questions around either scale or how this compares to ing's offering yeah i mean these are great

1:34:33

questions so um we prior to building this we tested some of the technologies you mentioned

1:34:39

um and we've uh the technology we're using isn't software based cryptography it's hardware based

1:34:45

what that means is that we don't have scalability problems so this this solution will 1:34:51

absolutely scale and then the big difference uh compared to zero there's a few differences compared to zero knowledge proofs and

1:34:56

the work ing was doing which i'm familiar with one is that the party sending the data 1:35:02

didn't have to make doesn't have to make any changes here for us to use this platform so you notice that we use open banking we use

1:35:08

the existing apis the banks don't have to change anything and neither do the aisps if we're using any

1:35:13

so we're able to preserve the privacy without requiring them to start adopting special software

1:35:19

right which would be required of zero knowledge proofs and the other thing with knowledge proofs is that they are new cryptography that needs to be tested 1:35:26

and proven and we're using existing well-established proven

1:35:32

nist approved cryptography that's well established in the financial services industry 1:35:38

so it's scalable and it's based on existing technology and it doesn't require the data sources to change

1:35:45

so all of those put together allow us to package up a product which is just ready to go into production and i think it's one of the first of its kind 1:35:53 eddie thank you i appreciate these these are no and then enough time to discuss this properly you have a question from 1:35:59 anil in the sidebar i'd also just if no one's mentioned it to you our colleagues in singapore the monetary authority have done a lot 1:36:05 of work on intel enclave chip security and so we might be able to connect you up with some 1:36:10 colleagues there they might be interested in this proposition but thanks for your time today eddie yep nick can i quickly answer anil on 1:36:16 the on the 90 days so we destroy the data straight away just so you know we do we run the query and destroy it that's 1:36:22 it we don't renew it after 90 days there you go sorry rapid answer thanks very much 1:36:27 eddie um okay into the final two uh next up we have direct id we're running a couple of 1:36:33 minutes behind of course we weren't cutting any of the teams short so just to let you know we'll probably run 1:36:39a couple of minutes past the hour and so over to direct id 1:36:47 hi we are direct id we're gonna my name is stefan zikolau i'm the data scientist for direct id 1:36:54 and today i'm going to talk to you about the poc we made for emerging financial distress 1:37:00 um excuse me um 1:37:06 [Music] okay uh first of all a little bit about 1:37:12 direct id uh directed is an open button platform that not only creates us 1:37:18 an aggregator but also has the ability to generate insights on top of the data they pass through our 1:37:24 platform some of our products you can see them in the screen are based on open binding data and 1:37:29 provide identity checks customer of boarding created risk management 1:37:35 operational efficiency affordability as assessments collection recoveries and many other

1:37:40 data analytics solutions before we talk about our psc 1:37:46 we need to provide the definition of financial distress before we can get into details of our solution 1:37:54 the definition for the financial distress is the following financial distress the condition in 1:37:59 which an individual does not have the required resources to meet the financial obligations 1:38:04 throughout to this person creditors the aim of the study is to create a 1:38:11 system based on mathematical modeling and statistics which will provide us with the probability of an individual 1:38:17 having immersion financial distress this idea is that can help the financial institutions get them 1:38:23 get better decisions on applications the data we selected a very old data set 1:38:30 for which is from real data that was being anonymized it's from 2000s and the reason we 1:38:39 selected these datasets is because they consist of anonymize real clients data they contain loan 1:38:45 outcomes which can then we use to derive our insights 1:38:50and they contain demographical data and they're publicly available so our solution can be tested by anyone in the 1:38:56 market a proposal a proposed solution is to take these data sources in their 1:39:02 format pass them through our behavior analytical process we have indirect id it generates 1:39:09 features which some of them are competitive so how an individual compares to the 1:39:14 rest of the population affordability features so what is the affordability of the person 1:39:20 and account statistics like how many transactions i have per month on average then each person 1:39:29 will be passed through our mathematical modeling statistical analysis then that tool generates probability of 1:39:36 the default or the emerging financial distress now in the next slides we're going to 1:39:42

talk about implementation of our proposal solution the first step we did was to 1:39:48 take the data sets and clean them the datasets were quite old i had a lawful data format issues 1:39:54 and a lot of them were in czech which meant we needed to translate it 1:39:59 after the cleaning processes we started pre-processing the data sets 1:40:05 by generating all these sites we discussed earlier there were around 190 insights we denerate for each individual 1:40:11 customer the problem was the class were imbalanced so very few vulnerable cases 1:40:16 exist in the dataset so in the preprocessing step we generated synthetic data for ourselves 1:40:23 in the area of vulnerable cases then we use all these synthetic and 1:40:31 non-synthetic data on our modeling statistical analysis process 1:40:36 which will try to optimize our models for the weighted recall which means we try to make our models predict as best as 1:40:44 they can the vulnerable cases and then we're able to provide the probability of emerging financial 1:40:51 distress here's some of our preliminary results 1:40:56 of the proposed solution as you can see here in the confusion matrix on the left side of the screen from the 1:41:03 six vulnerable cases we had in the initial uh we picked and we take out 1:41:08 of the training set from the initial data set we managed to predict the five of them 1:41:13 which that was the metric we tried to optimize our engine 2 which is a great result 1:41:20 given the imbalance of the classes so what's next after the poc 1:41:28 as a platform that democratized the acts of financial data we are committed to help people in difficult situations 1:41:34 we are looking deeper to create a pilot for the starting of emerging financial distress 1:41:40 now the reason direct id can be a very good so can provide great solutions from 1:41:45 these things is that instead of uh like the financial institutions that generate 1:41:51

some sort of numerical attributes from their real transactional data we have multiple toolings that can 1:41:57 generate more and enrich insights on the data which means we can create a lot more data 1:42:03 points than a normal financial institution some of them we have as a small selection is here 1:42:10 they can verification create debit recurrences categorization merchant notification and customer 1:42:16 numerical attributes we are open for collaborations if you want to join us in our journey to 1:42:22 improve the financial health of vulnerable people please get in contact our contact 1:42:28 details is this one thank you very much and i'm available for to answer any question 1:42:37 stephanos thank you for your presentation which is actually very very quick so you've got us back on time 1:42:43 thank you um yeah my uh my quick question was around as one of the issues we face when we look 1:42:49 at these sorts of products and models is the proliferation of datum the metrics the number of risk flags the 1:42:56 number of indicators and and almost the sort of paralysis of uh an analysis paralysis because it's just 1:43:02 so much information that could be brought to bear and considered how do you how do you sort of weave through that how do you get to 1:43:08 what is the the really crunchy the really important metrics for firms and others to make decisions off 1.43.13the back of in this sea of of information that's true the important thing is to reach the data in the right 1:43:19 process in order to generate the right insights it's not that much on what we're going to select on the modeling 1:43:26 as long as the data have a predictive power and as you can see for our metrics here 1:43:32 our curve can show that the our classes are very hyper are separable it means our models didn't have to do 1:43:38 any difficult guessing the all the difficulty was in the pre-processing so 1:43:44

picking the right data be very very careful on how we'll use them generating as much 1:43:51 insights as possible which in this case weren't that good because 1:43:56 as a financial as in financial institution we couldn't use our own arranging tooling we discussed 1:44:03 so we caught it on the aspect of what the bank will do and the most important metric i believe 1:44:10 that a scientist in this case is of very very balanced uh cases is the vulnerability they recall which 1:44:17 means try to identify as many possible cases as you can that they're truly vulnerable and if you 1:44:24 miscalcified the non-vulnerable cases are not that big of a deal because financial institutions 1:44:30 will have to vet it anyway so you really really don't want to miss a vulnerable case so 1:44:35 we try to hyper parameterize our models from this aspect 1:44:42 i'm sorry if i missed it um what was what were the sort of key flags of vulnerability that you were 1:44:49 trying to sort of build the model to predict and identify what were some of the main flags that you were 1:44:55 trying to target uh we didn't do the explainability of the model because we didn't have enough time like our 1:45:01 solution but the main metrics were using were um 1:45:06 so calculations around your affordability and your main east income streams like how much of that was 1:45:13 [Music] recurring credits how much was debates debates minus credits and things like 1:45:19 that but what was the percentage of your uh debits from your total credits so we generate around uh i think 190 1:45:27 features um as a next step we'll also provide at some point uh an explainability to 1:45:35 tell you what was the most important thing that resulted to tell that person was vulnerable 1:45:40 but that's quite a big research for 10 weeks yeah yeah understood um sorry for setting

1:45:47

unreasonable expectations of what's what's for in a couple of months um thank you 1:45:53 we really want to do something like that but uh yeah it's time yeah absolutely thank you very much um 1:46:00 as with all of the presenters if there are further questions to ask in the sidebar please feel free to do that but otherwise for now stefanos thank you 1:46:06 very much and thank you to direct id thank you very much okay on to 1:46:12 our last but not least uh calgary 1:46:20 well thank you and hello everyone my name is chrissy korafa and 1:46:27 starting off i'd like to make two observations in the context of the pandemic 1:46:34 firstly there is a really debate and discussion and also as part of the fca sandbox which we 1:46:42 thank how we care about the vulnerable in our society 1:46:47 and secondly i would like to remind you that there is a small group out there who are preving on the most vulnerable 1:46:55 who could be or parents dear friends who are susceptible to financial abuse 1:47:02 so it is up to us on this call to make sure that we take all the necessary steps 1:47:10 to prevent this from happening so i'm crazy choraphara at the ceo calgary and 1:47:16 i will tell you today what calcare is doing at calgary we help financial 1:47:23 institutions interpret their customers behavior to protect them against moments of vulnerability 1:47:31 why is this important it is important because we all want to build a financially inclusive 1:47:37 safe and caring society from the fca's own research nearly one in every two of us will be in 1:47:45 some form financially vulnerable in the future what that means is that at any time 1:47:50 nearly 50 percent of financial institutions customers are at risk of experiencing fraud scams or 1:47:58 misselling costing their household on occasion up to 300 000 pounds 1:48:04 potentially financial institutions millions such as the 64 million pound um

1:48:11 fine last year that lloyd's had i told you why this matters to us and 1:48:17 what is the problem and now i'm going to tell you what kolkera is calgary is a regtech platform that 1:48:23 enables financial institutions specialists to interpret the financial 1:48:29 behavior of their customers to keep them safe during the fca digital sandbox calgary 1:48:36 used data sets to develop a complete set of underlying of anomaly detection 1:48:45 models and improve its algorithms that help financial institutions to identify their 1:48:52 customers who are at risk of financial abuse provide them with a list of transactions 1:48:59 that drive customers vulnerability risk and enable them to analyze customers vulnerability cases 1:49:07 using drill down capabilities through transaction level let me tell you how we do that we 1:49:13 do that in three steps first the platform retrieves customers transactional data 1:49:20 from payments or card transactions we then flag events indicating vulnerability driven 1:49:27 by underlying processes based on our financial abuse framework 1:49:32 that we have designed and through deploying our algorithms that we have built 1:49:38 and lastly we demonstrate the analysis on the dashboard with additional capabilities for 1:49:44 financial institution specialists to simply and easily understand their customers behavior to take 1:49:50 relevant and timely action this innovation enables financial 1:49:56 institutions to automate manual processes to better manage their vulnerable 1:50:03 customers and potentially increasing their customer base speed up their investigation time saving 1:50:11 money and resources and also help uh to get them ready for the fca regulation 1:50:17 ensuring that most vulnerable are protected now let me tell you how our product is 1:50:25 differentiated we interpret our customers financial behavior to safeguard them against

1:50:31 financial abuse by using a novel financial abuse scenario approach which 1:50:37 is based on neuroscience and decision making capacity logic and ai techniques 1:50:45 the interpretation of the data is a result of numerous underlying algorithmic models 1:50:51 that we also have in developing during the fca digital sandbox and the results are presented on the 1:50:58 dashboard this allows the financial institutions to drill down 1:51:03 into the causes of customers vulnerability and understand the underlying drivers 1:51:09 now our next step is to do proof-of-value pilots with financial institutions to help them 1:51:15 better quantify how many of their customers are at risk of financial abuse 1:51:21 help them understand where efficiencies can be achieved in the vulnerable customer management process 1:51:28 and also quantify the benefits so that they can choose if we should to scale up with our product 1:51:35 our experienced team is here to help you manage this process and we enable financial institutions to 1:51:42 be more sophisticated to define identify and support their vulnerable customers this is both 1:51:49 a win both for customers and financial institutions and we believe now is the time to take 1:51:55 concerted action um i'd like to ask to get in touch at 1:52:01 partnerships at calgary.com my name is chrissy from calgary and i would like to thank you all for 1:52:06 listening thank toby and teresa for all their support the fca team for organizing this 1:52:12 and the mentors who have supported us during our time with the fca sandbox thank vou 1:52:21 thank you chrissy uh interesting presentation and uh thanks for hanging on to go last always always a difficult 1:52:27 slot um i was just going to ask again sorry it's a bit of a bug bear in mind but 1:52:32 this question about explainability so um obviously you said your solution combines 1:52:37

clinical neuroscience expertise and a uh a mixture of um ai techniques and 1:52:44 advanced algorithms how do you um one of the things we hear a lot from big institutions is 1:52:50 we won't implement something that we can't explain we won't you know because we know that you as a regulator will take a dim view of us if 1:52:56 we do that so how do we collectively work through that challenge of explainability transparency and how do 1:53:02 you think your solution can be explained in a way that people can trust and rely on it 1:53:08 yes so um there has been a lot of research uh also from the air from so the founder 1:53:15 is um of calgary dexter pen uh dr dexter and he has done 1:53:20 uh a lot of research on financial decision making capacity and 1:53:27 there has there has been like uh initial frameworks and logic and 1:53:34 some explainability on how people make decisions and that ha and it 1:53:41 has been found that that can be reflected on the seasonality and the patterns 1:53:48 of financial transactions and so uh we took um 1:53:55 so in the we were part of the data sprint in the summer and we understood that 1:54:02 talking about financial vulnerability is pretty broad there are many use cases that fall under 1:54:08 financial um vulnerability and we felt that we could have the capacity of determining financial abuse 1:54:16 because it's also linked to the experience that he had as a doctor many of the patients that had 1:54:24 poor financial decision making capacity coins would also experience financial abuse 1:54:32 by being more easily scammed or defrauded because of the 1:54:39 poor capacity of making the judgment that this is a potential for others come 1:54:46 so um it made sense that we focus on financial abuse and 1:54:54 this this decision-making logic was also embedded in the way we 1:55:00 interpret the data and the way we have been developing our models to see it from different

1:55:07

perspectives thank you that's very helpful um a couple of questions in the sidebar sort

1:55:13

of overlap with one another you know what is the data that you're using to identify vulnerability and how do you

1:55:18

define that so if there's anything you can add on those i don't know if you can see those questions

1:55:23

yeah so uh as part of the digital startups we would use the check data and 1:55:31

we had also previously some synthetic data which was mainly transactional based 1:55:39

yeah okay uh okay we are out of time i believe unless

1:55:45

there's any final final questions i'm going to give everyone 20 seconds and then we're going to close out

1:55:50

no going to leave it there chrissy thank you very much for your presentation and for your time today

1:55:56

um thank you to julian craig cj mason ignacio manesh mike addie stephanos 1:56:03

and chrissy for their presentations and their discussion with you all today thanks also to teresa for keeping us the

1:56:09

time i'm sorry i've gone over by a couple of minutes and for running keeping everything running smoothly and for all of her support actually many of 1:56:15

the teams mentioned it uh theresa's support over the past few months so thank you very much to teresa um likewise i'd just like to

1:56:22

thank toby whitlock from the fca who's been a real leader in stall of the digital sandbox and has supported

1:56:28

many many other teams so thank you also to toby for all your efforts 1:56:33

if you'd like to engage further with any of the teams please do so through the sandbox website or through the contact

1:56:38

details that those teams have shared there will be videos of all of these showcase sessions uh

1:56:44

from today and yesterday and indeed tomorrow's one they'll all be updated uploaded onto the digital sandbox

1:56:49

website very soon um we at the fca and the city of london corporation will be 1:56:55

evaluated and considering um how to take the digital sandbox forward it's been a lot of useful feedback from the teams

1:57:01

about the features that have worked well and those that perhaps require some refinement and development but if

1:57:08

any of you that are on this school today would like to play any sort of role in a future cohort of the sandbox as an

1:57:13

advisor a mentor or a provider or any technical assistants would be very delighted to hear from you

1:57:20

for now though thank you all for joining us for a couple of hours this morning i hope it's been an interesting

1:57:25

session for you all stay safe and have a pleasant day thanks everyone English (auto-generated)

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