Connectedness

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You don't 'do' technology, you 'do' people and the people thing and then you add technology back in. (John Maeda, Global Head, Computational Design and Inclusion at Automatic).[1]

An accepted story about South Africans, and people in general, is that we are bad with money. We are short-sighted when it comes to savings behaviour, chasing lifestyles that we can't afford and failing to put money away for the long term. We are not making enough use, or not enough of us are making use, of the services and products provided by the financial services industry.

The picture looks bleak: only 6% of South Africans will be able to maintain their lifestyles when they retire.[2] According to March 2016 data from the

South African Savings Institute, 76.6% of the average South African household income goes to servicing debt. South African households on average are saving only 3% of their household income.[3]

However, there are other ways to look at South Africans' money behaviour. For example, according to the National Stokvel Association, 40% of South African households use informal trust-based models such as stokvels.4 There is evidently some kind of widespread savings behaviour in many South African households and communities.

Further, as this year's *Benefits Barometer* makes clear, South Africans who are earning money tend to have a wider lens of responsibility. This means their income is supporting many households, and many incomes could support one household at different times. There is often a kind of investment assumed with this responsibility: if I support someone now, they are more likely to support me or my family when we need it. When it comes to income generation and responsibility, these are culturally established norms of behaviour. Yet, formal financial services do not seem to recognise there are salaries which support multiple households, and an expectation that they will continue to do so.

There is an intuitive behaviour around money that formal solutions seem unable to connect with. Perhaps it's our view of the behaviour of South Africans that should be challenged if we are to transform the financial products and services we offer.

The promise and power of technology

Fintech refers to the use of technology to improve activities in financial services. It's a buzzword thrown around in the hopes that it will somehow be a silver bullet that solves financial services challenges. Certainly, technology can help make existing financial services more efficient, but that efficiency can exacerbate and accelerate co-dependency – which is a cycle of managing different forms of debt in order for customers to maintain a lifestyle, and financial services to grow business. For a view on the opportunities we believe technology presents, we take a look at some of the foundations of and developments in today's ubiquitous technology.

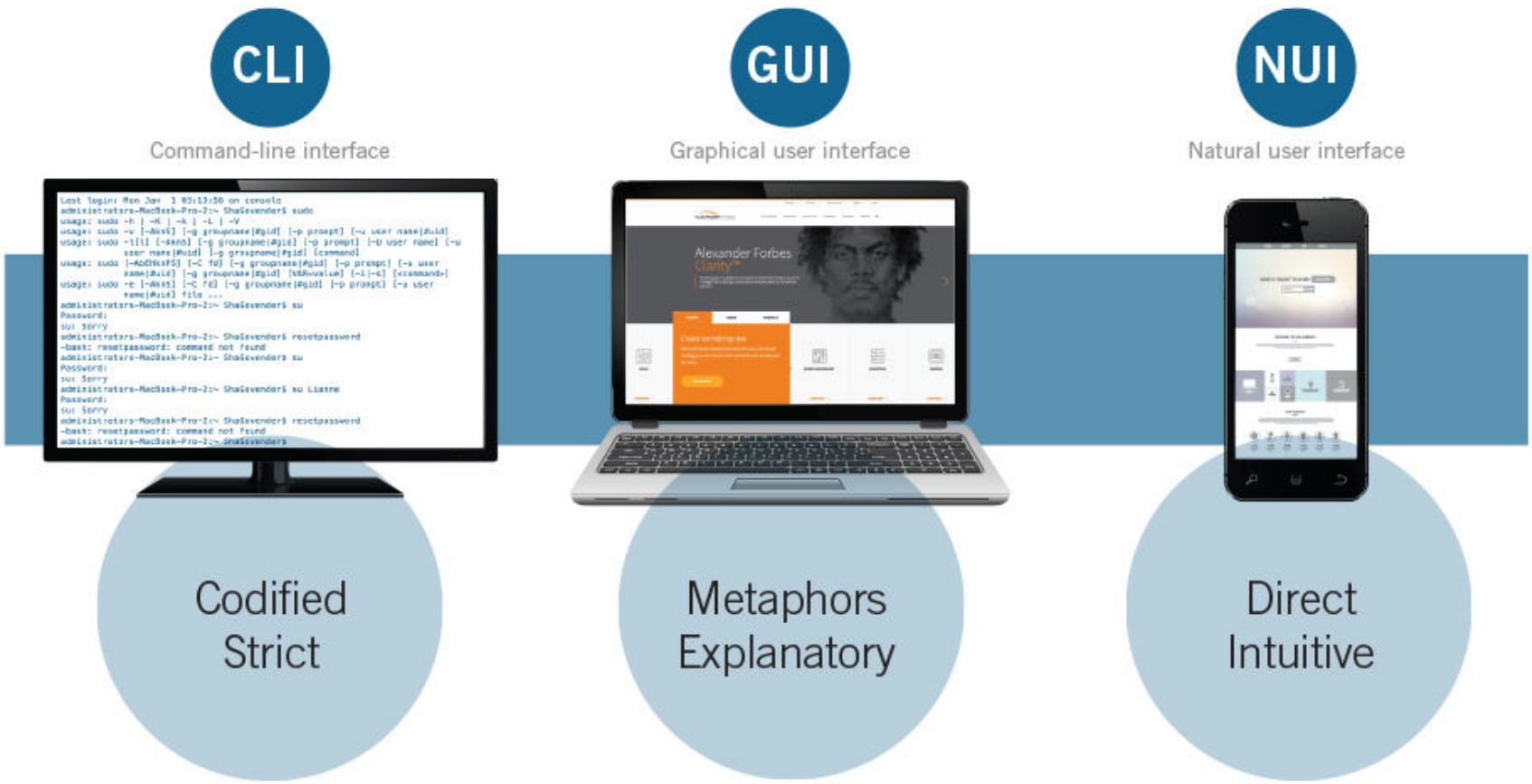
The trajectory of computers from being accessible only to the elite to becoming ubiquitous and in our pockets is a lesson in using the power of technology to increase accessibility. In the 1970s and early 1980s, you used a computer via a command-line interface (CLI). This was a rigid, controlled interface, where users typed in specific commands to use the computer. Access was limited by knowledge – to use a computer, you needed to learn the language and syntax of interaction, and you were dealing with a fault-intolerant interface. Unless the information entered in the command line was 100% correct, there would be no response. As processors became cheaper and more powerful, computers in turn became more powerful and some of this additional power was used to make them more accessible.

Today we are used to the graphical user interface (GUI), using a mouse to navigate our way around a computer. The shift to a natural user interface (NUI) allows users to tap a screen in an intuitive way, allowing even more access to computers. Voice and gesture interfaces are starting to become more common as well. Instead of requiring very structured and rational input from users, computer interfaces have become more tolerant of errors, unclear use, imagination and exploring.

The effect of the NUI on access is perhaps best observed not by how quickly a toddler can take a selfie, but how easily grandparents can make Skype calls from an iPad.

There has been an evolution from rigid interfaces to intuitive interfaces, allowing increased access with each iteration. This trajectory demonstrates the access that can be achieved when we capitalise on increased processing power to allow for a more natural interaction with services and products, made possible by technology.

Figure 4.6.1: The evolution of the user interface



Could the same approach be taken for financial services and products? With such increased computing power, we should be able to adapt and respond to changing needs and unclear inputs from customers. But financial services are like a command-line interface, demanding high levels of accuracy and knowledge from a customer, intolerant of the actual circumstances. What is the natural user interface for financial services?

The answer is perhaps best stated by Koning and Murthy in their 2017 paper: 'The key is to enable customers to preserve their current mindset and behaviours, instead of forcing them to change to fit digital tools. In this stage, the value of digital financial services comes from letting people do what they have always done, just with a greater sense of control, convenience, reliability, security, and perhaps privacy.'[5]

Open technology

The internet is a connected system of networks, and its founding architecture and philosophy – open networking – set the foundations for its ubiquity and success. Its open standards and open protocol architectures guide the process for which new standards are created and allow for new protocols to be invented and inserted into this layered architecture.[6] This has allowed people to do new things with the network, unconstrained by the original design.

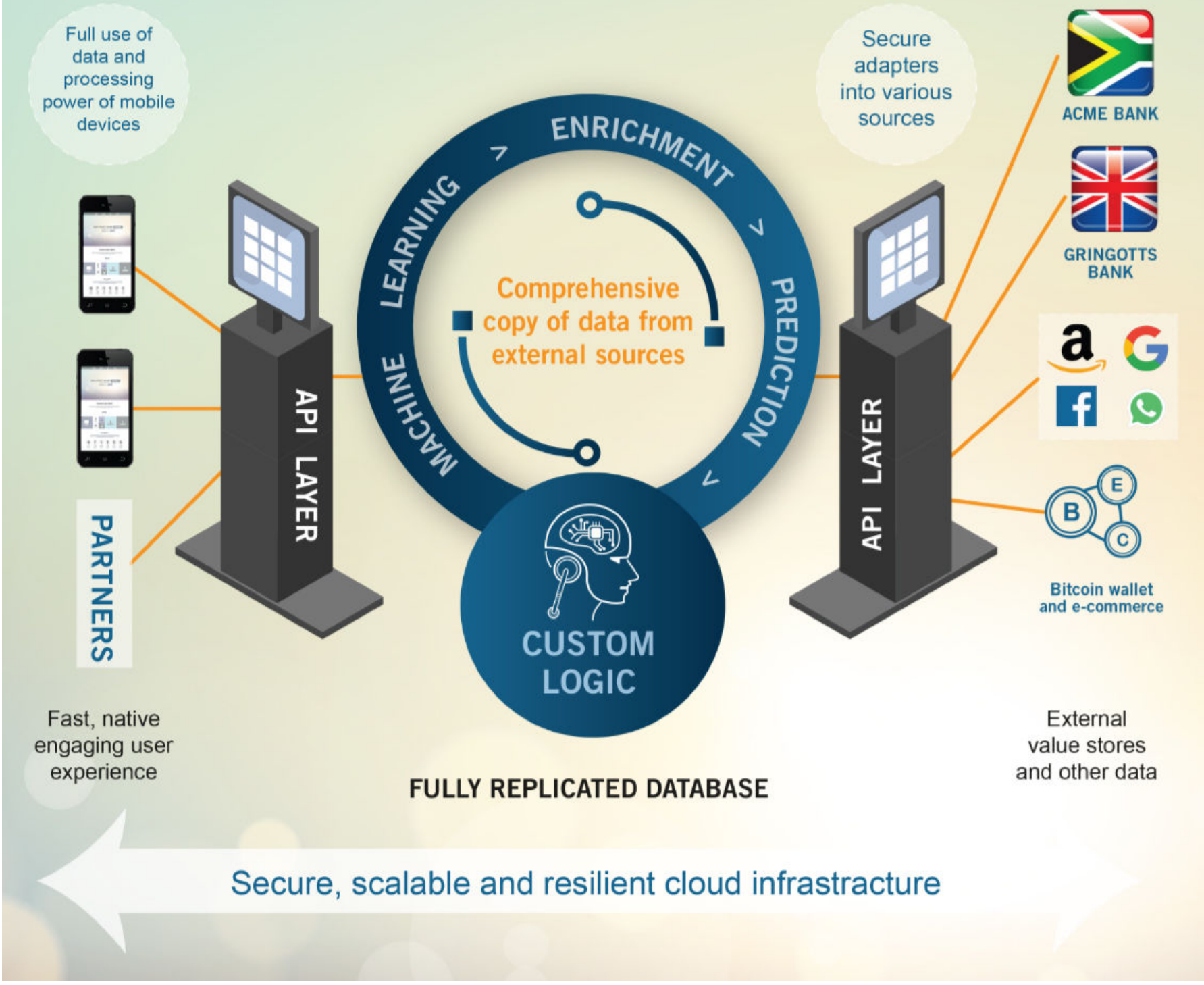
This philosophy of openness, allowing for both modular growth (new technologies can be added and removed) and networked growth (technologies can collaborate and create new services and products in combination) underpins today's successful digital and technology businesses, although they may have different degrees of openness.

A classic example, Facebook, illustrates the growth opportunity of open technology. Facebook has APIs (APIs are application programming interfaces – a set of standards that allow applications to access and interact with features or data of other software applications) that allow other services to use information from Facebook. For example, there are services for using a Facebook login for another service, and for sending information to Facebook.

This creates an ecosystem where the various services are able to provide more value because they are combined and working together. Note, that Facebook may be open by design, but is not built for privacy by design: users are not in control of their own data.

Technology allows for transactions between strangers because it creates structures and processes to facilitate the trust needed for those transactions to take place. Airbnb has created a platform to facilitate people paying to stay in the home of someone they don't know. The notion of doing this without the structures that Airbnb has put in place is unthinkable for most people. Airbnb is able to aggregate information from various sources (such as Facebook and LinkedIn profiles) to verify a user's identity, and provides a framework for users to share reviews that help verify whether a particular user should be trusted. eBay, Etsy and Amazon Marketplace provide platforms for smallscale sellers and buyers from across the globe to connect and transact. Where once people could sell only to people close to them, in local markets, these platforms provide the infrastructure for people to sell goods globally, whatever their scale.

Figure 4.6.2: Kin open architecture model



The principles of open architecture allow us to design scalable solutions which can build on existing infrastructure and services, and allow other services a customer chooses to provide additional value. The value is the layer of logic and enrichment on top of customer data we are able to provide. The customer should be able to use this on top of any financial services products.

If the system is modular and built to standards, and the customer controls their data, they can extract their data and potentially use it to move elsewhere. There is no lock-in by design. Instead, the service must provide value and meaning to the customer for the relationship with that customer to continue. If the customer is truly portable, then organisations need to continue to provide value and a reason for the customer to stay. The service that a customer could switch to might not exist initially, but organisations need to provide value and a reason to stay as though it already does.

There are several innovative financial services players using this ability to combine data from multiple sources to provide additional services. South Africa's JUMO and Nigeria's Social Lender are two such examples.[7] Both create alternative credit scoring profiles based on social data (such as Facebook profiles) and mobile phone behaviour. This gives customers access to loans from institutions they may previously not have been able to access, based on their credit history.

Similar approaches can be imagined for savings and asset accumulation solutions. And these first steps can help to familiarise customers with interfaces and people who are equipped to provide additional information on financial options.

This is the promise of technology for connecting customers to formal financial services solutions: build solutions that fit into existing patterns of behaviour, rather than requiring customers to fit their behaviour to the environment. Industry players should use technology to adjust their offerings to match customers' lives, rather than the other way around.

This is not about digitising existing products or putting a nicer interface on existing products. It's about allowing customers to challenge products and institutions to fit their lives.

Why have other interventions not worked?

Smart people around the world have harnessed the power of technology and combined it with an understanding of human behaviour, using behavioural economics and analysing behaviour data at scale to reduce friction at the point of someone taking action. If you have ever used Amazon's 1-click ordering, you will appreciate how the convenience of that button makes it much easier to purchase items. Amazon has already

stored your default shipping address and payment details, and so it's almost frictionless to go from browsing to having purchased, with not much time for pausing and reflection in between. This smart use of technology and human psychology tends to make it easier to do things that don't always serve us in the long term.

Reducing friction for behaviour that improves long-term success is hard. This was one of the challenges we had with 22seven – a personal financial management tool founded by Christo Davel. We could demonstrate what people had to do but could not remove the barriers to doing it.

Some of the challenges in fintech solutions include:

1. **Too much friction between the service from which you get good information, and the service with which you should take good action**
   For example, 22seven accumulates data for a user and provides nudges to change behaviour. However, the point of action (such as transferring money into a savings account) is too far removed from the point of information (the nudge). The effort involved in overcoming the last hurdle means only the dedicated few take action.

2. **The costs of 'good' action are high**
   Whether logging into multiple services to take action or being required to connect with a financial adviser before taking action, there is often an unnecessary time-cost to taking action. Transaction fees further deter customers from multiple small transactions that are likely more reflective of a customer's behaviour and opportunity to save.

3. **The incentives are perverse – businesses use the data to sell you things, usually debt**
   Both globally, and in South Africa, financial services players offer 'free' services to customers to help them to track their financial behaviour, and gain insight based on their data. Usually these services require the customer to also enter an agreement where the financial services provider may also use the same data to offer products and services to the customer. Since the financial services provider makes money from selling these products, this deeply personal data is often used to sell products – often debt – more easily, rather than necessarily helping customers live better lives.

What we think can be done better

The best minds of my generation are thinking about how to make people click ads. That sucks. (Jeff Hammerbacher, data scientist, ex Data Team Lead at Facebook)[8]

It is not technology in and of itself that will solve these challenges. It's designing services that are networked, open and accessible:

- able to draw in and read from multiple sources to create a singular view
- able to combine multiple data sources to generate insight and value from the combined data
- able to allow other sources to read from the combined data and provide further insight based on that combined data

There should be open interfaces for drawing data in, and intuitive customer interfaces that allow the customer to interact and provide information in a natural way. The data that accumulates should then be able to create products that truly reflect customer needs and context. And all this with privacy by design and the customer is the central locus of control.

If there is an informal savings behaviour, can we help to formalise this, and make it more robust through technology? South Africans collaborate on money matters already, and community savings are happening in households across the nation. If technology enables us to tap into existing behaviour, and emphasise particular aspects, why not use great technology and intuitive interfaces to help people to facilitate this behaviour?

We think that technology interventions can provide a far more human approach to financial services that address challenges and provide opportunities for people to both get by and get ahead. This view is built on the concept of social capital, based on the definitions set out by Woolcock and Narayan (2000). Here, the use of social connections in the context of being able to 'get by' and 'get ahead' maps to how people use and borrow money in different situations, and provides an opportunity for exploring particular financial needs and solutions.[9]

Customer need	Social capital	Financial need and informal solutions	Fintech opportunity
 GET BY	Bonds – close ties within a community; informal connections	Make it to the next pay cheque Survive an unexpected incident Turn to community for support; stokvel or informal lending	Fintech rushing to 'solve' challenges here – easy and lucrative Transactional products Social credit to provide (short-term) loans
 GET AHEAD	Bridges – loose ties outside a community. More formal connections or connections to formal institutions	Be able to earn more; live a different lifestyle Income supports multiple households, particularly for education needs	Kin believes that the opportunity is here: using networks and data to connect people to the knowledge that will help them live better lives

We believe that current fintech solutions tend to focus on helping people get by and are falling short on helping people get ahead.

Our vision remains unchanged: helping people to be better with money. We think that there is an opportunity to provide a platform for people to collaborate better around money, and that as people make use of the platform, connect them with knowledge to aid them on their money journeys. We believe that as people use the platform, and connect more data, we will be able to develop better products and services to help people live good lives.

And that is why we are building Kin.

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