Technology in community finance

Technology 101 webinar
January 2021

Technology 101

An introduction to technology

- Understanding the basics
- Jargon busting and overcoming the terminology barrier

Technology in community finance

- Where we are today and what's on the horizon?

Case studies

- Central Liverpool Credit Union – Geoff McKay
- Clockwise Credit Union – Simon Foreman

Our support for technology in community finance

Q&A

An introduction to technology

"The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency.

The second is that automation applied to an inefficient operation will magnify the inefficiency."

Bill Gates

The technology stack

The same building blocks apply to almost any computer technology, whether a core banking platform or the phone in your pocket
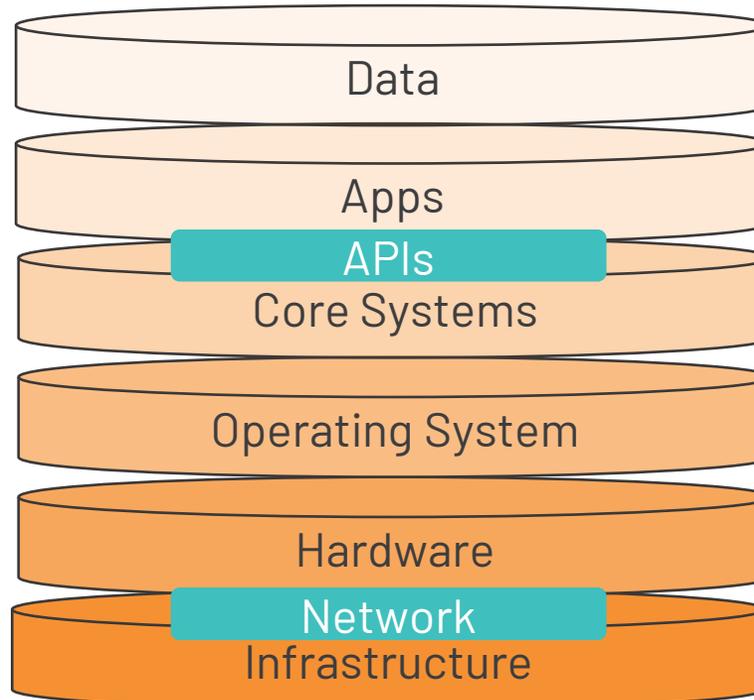
contacts, search history, location

Spotify, Waze, Yolt

phone, text, browser

iOS, Android

iPhone 11 64GB, Galaxy S10 128GB

Huawei, Erikkson, Nokia

| Data |
| Apps |
| APIs |
| Core Systems |
| Operating System |
| Hardware |
| Network |
| Infrastructure |

customer details, loan terms, savings balance, credit reference data

Credit Kudos, ADP, fintechs

core banking system, customer relationship management system

Windows, Linux, google

servers, desktops, storage

datacentres, cloud

Fintechs are powering banks

Mainstream banks are becoming dependent on a suite of Fintechs as they seek to innovate quickly

Technology in community finance

Investment in technology

- **94%** of respondents recognised technology as **essential** to their business today

- **67%** say it will be **pivotal** to their success in the next 5 years

- Technology **budgets** are low and can constrain the extent to which technology is used

- IT **capability** within lenders is varied, but 50% have no dedicated IT person on their team

Recent experiences like the Credit Union Expansions Project have left many feeling more **cautious** about embarking on technology programmes.

Outlook on the role of technology over the next five years

- Our use of technology will be pivotal to our success as a business
- We will increase our use of technology substantially
- Technology will play a marginally increased role in our business

7%

26%

67%

Annual IT Budget

| Less than £50k | Between £50k and £150k | Between £150k and £300k | Between £300k and £500k | Between £500k and £1m | Above £1m |
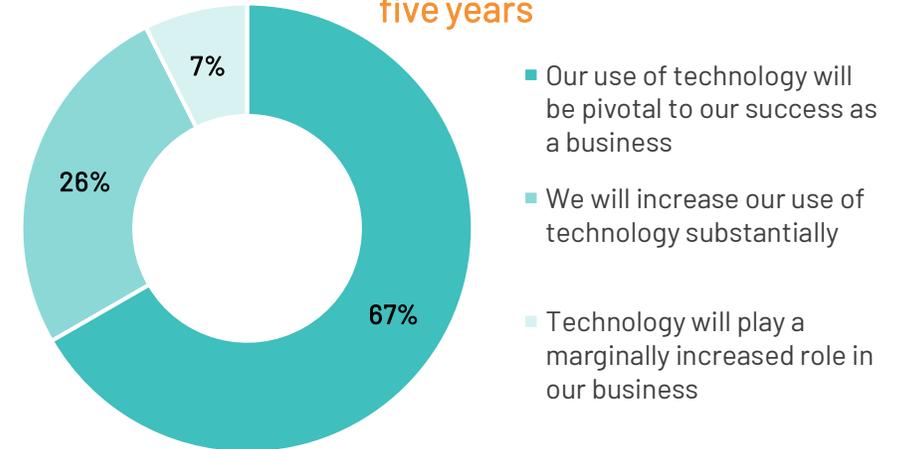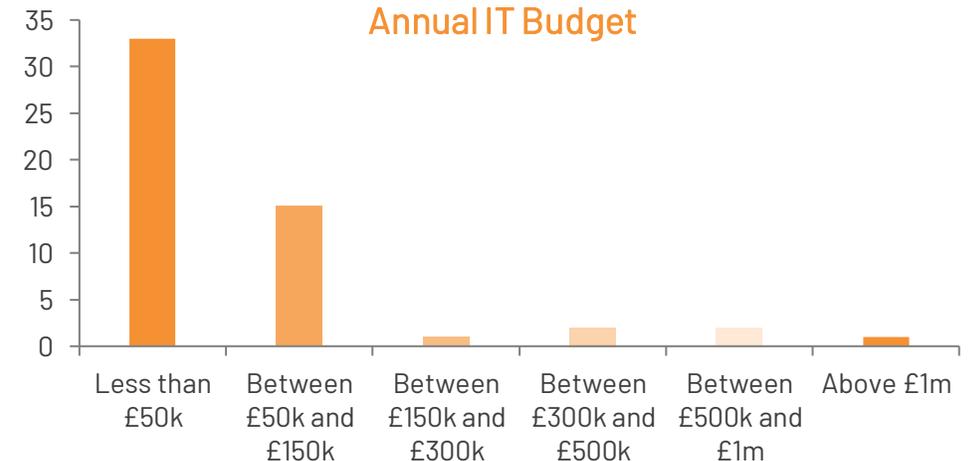
Pillars of success

Addressing each stage of the loan lifecycle shifts the focus to specific measures of success

Stage of loan lifecycle	Consumer engagement	Decisioning	Back office operations and technology
Success factors	Increased awareness Improved accessibility Enhanced attractiveness	Fast Accurate Fair Inclusive	Efficient Accurate Informative
Outcomes	Consumer in control of their finances using advanced digital tools; A modern fresh digital experience	Fair treatment of applicants with alternatives or support for declines; reduced losses; basis for sector-wide aggregator	Efficient straight-through-processing enabling economies of scale; better informed decisions; building a platform for shared services

Most used technologies

Consumer engagement
Bespoke
Kesho
Nivo
Incuto
Progress
VivalT

Core Loan Management
Kesho
Incuto
Progress
Caroma
Conaccess
VivalT

CRM
Kesho
Incuto
Bespoke
Progress
Caroma
Microsoft
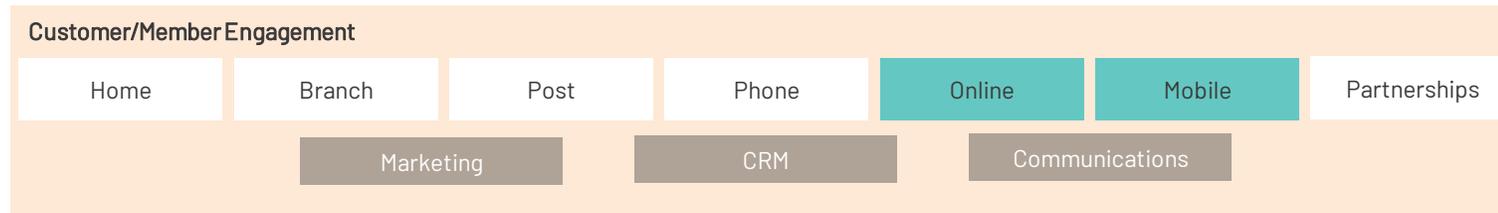
Decisioning
NestEgg
Kesho
Lending Metrics
Transunion
Experian
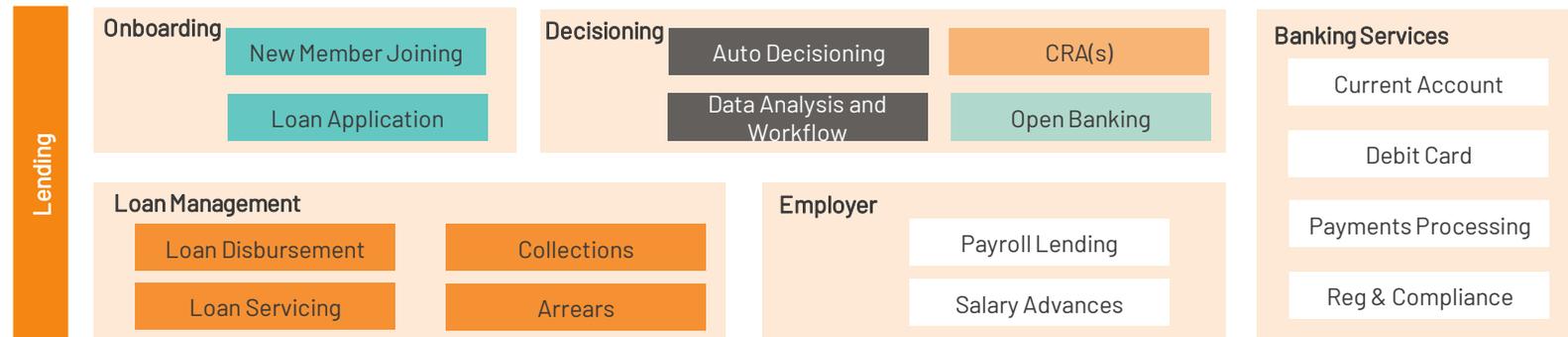
Open Banking
Truelayer
Lending Metrics
Experian
Transunion
AccountScore
Credit Kudos
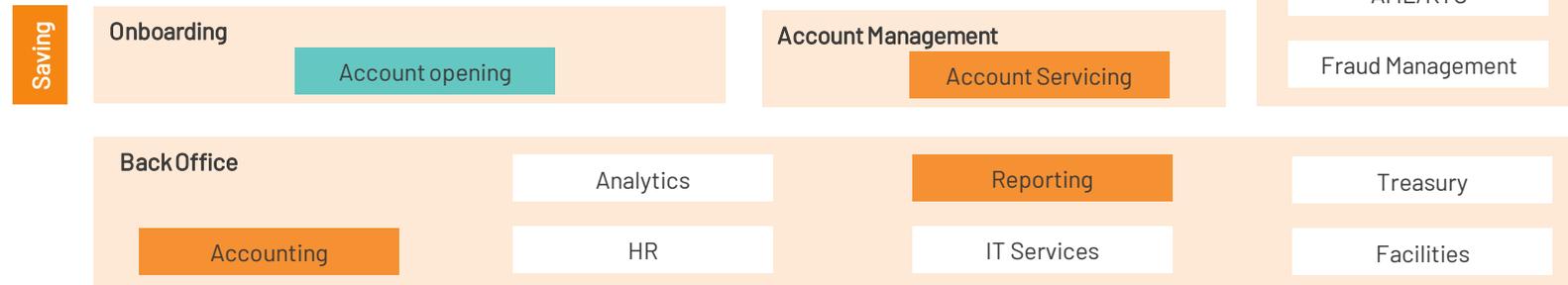
CRAs
Transunion
Equifax
Experian

Customer/Member Engagement

| Home | Branch | Post | Phone | Online | Mobile | Partnerships |

| Marketing | CRM | Communications |

Lending

Onboarding
New Member Joining
Loan Application

Decisioning
Auto Decisioning | CRA(s)
Data Analysis and Workflow | Open Banking

Banking Services
Current Account
Debit Card
Payments Processing
Reg & Compliance
AML/KYC
Fraud Management

Loan Management
Loan Disbursement | Collections
Loan Servicing | Arrears

Employer
Payroll Lending
Salary Advances

Saving

Onboarding
Account opening

Account Management
Account Servicing

Back Office
| Analytics | Reporting | Treasury |
Accounting | HR | IT Services | Facilities

The essential role of an IT strategy

IT Strategy is a plan of action to create an information technology capability that enables the business strategy and goals

- Linked to business goals

- Derives a set of principles

- Sets out priorities

- Develops business cases and allocates budget to technology investments

- Defines the roadmap

- Scans the market for innovations and opportunities

Without an IT Strategy a business can be a reactive consumer of technology, easily succumb to the lure of new shiny technology, build a complex web of suppliers and solutions and direct IT investments at initiatives that don't advance the business.

Central Liverpool Credit Union – Geoff McKay

Clockwise Credit Union – Simon Foreman

Technology support for the sector

Our survey evidences a need for change

Our technology survey of November 2020 supports our hypothesis that change in technology is required for the sector to thrive - and in many cases to survive.

Three areas of systemic change are required for the sector to optimise its application of technology:

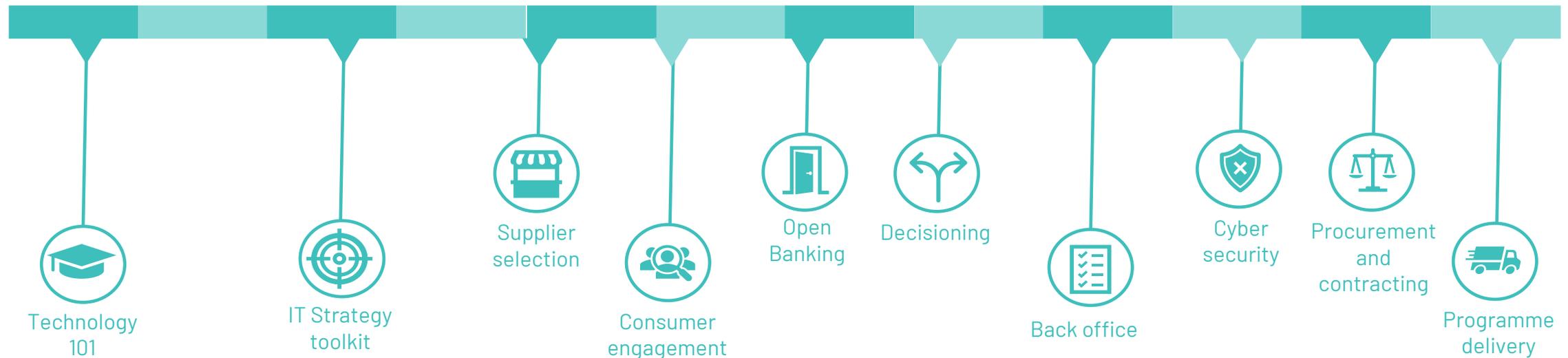| Legacy systems	Technology capability	Funding
Lenders who are constrained by their legacy system's inability to evolve and service their customers need to develop a strategy to address the limitation to their business	There's a shortage of IT capability in the sector which needs to change as technology becomes a more integral part of most community finance businesses	Technology is run on very small budgets, which will be tested if lenders continue to operate in siloes as legacy systems are replaced by modern technologies

We want to help the sector to navigate these three areas of systemic change successfully.

Indicative technology toolkits

We will work with partners and suppliers to deliver a suite of tools to help community finance businesses navigate technology and realise their objective of making better use of technology in the future.

We will continuously assess opportunities to support the sector in the evolution of its technology.

Technology 101

IT Strategy toolkit

Supplier selection

Consumer engagement

Open Banking

Decisioning

Back office

Cyber security

Procurement and contracting

Programme delivery

Q&A

Thanks for joining the call

Please let us know if you have any more questions or suggestions for other topics to cover in our Technology Toolkit

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Appendix

Cutting through the jargon

When you understand the terminology used to describe innovations, products and methods the mysterious world of technology becomes more accessible

Cutting through the jargon

Digital

used interchangeably with modern technology but usually refers to the user interface with the technology (eg a web presence or mobile app) but can be extended to the entire technology stack (eg cloud), sometimes referred to as SMAC (Social, Mobile, Analytics, Cloud)

Big Tech

reference to the most dominant global technology firms. Frequently referred to as GAFA – Google, Amazon, Facebook, Apple – or GAFAM if Microsoft is included

Fintech

(Financial Technology) is the name used to describe organisations that are providing financial service innovations or services underpinned by technology and usually with a stated intent of disrupting the status quo

Legacy system

tends to be used as a derogatory term to describe outdated technology that is generally inflexible, expensive to change, complex to interface with and difficult to extract and present data from

Big data

refers to the capture, storage, analysis and interpretation of large quantities of data that are beyond the capabilities of traditional data analytics

Cutting through the jargon

Artificial Intelligence (AI)

Technology that appears intelligent. It implies an ability to make connections between many different sources of data to draw conclusions, in the same way as a human brain is able to estimate the time to drive to a destination taking into account all external factors (time of day, weather, day of week, road closures) or recognise a location even when covered in snow

Machine learning

Enables programmes to learn through training, instead of being programmed with rules and as a result, can improve with experience in the same way that we learn and make adjustments from our successes or failures

Blockchain/Distributed Ledger Tech

At its most basic level Blockchain is a technology that enables records of transactions to be shared with all users of the Blockchain rather than being managed centrally by a single party. The replication of the 'record book' in multiple locations and mathematical controls makes it impossible to change a record without breaking the integrity of the record book, making it a trusted record

Coding vs configuration

Coding is the writing of computer programmes using computer languages (lines of code) such as COBOL, C++, SQL, Java, whereas configuration is the changing of parameters that make the system operate in a particular way. Akin to building adjustable shelves – the coding is the building of the frame, cutting the shelves and drilling the holes for the shelf supports, and configuration is the positioning of the shelf supports to the desired height. Configuration is generally the preferred method of change because it is proven, doesn't require the same level of specialism and requires less testing

Cutting through the jargon

Open architecture

A technology environment that has been specifically designed to plug and play with external systems, as a hi-fi amplifier is designed to plug and play with multiple separates (CD, tuner, turntable, speakers)

Application Programming Interface

A communication standard and point of connectivity used to connect two or more systems, akin to the standards of a three-pin plug and the socket in which the plug can be inserted to connect the household electrics to an electronic device

Agile

A technology development methodology where the end user 'product owner' is closely involved at the outset and the developers iterate through development cycles 'sprints', move quickly to prototype so that feedback can be fed back into the next sprint and a Minimum Viable Product (MVP) can be launched for real users at the earliest opportunity, rather than waiting for the finished product to be perfected

Open Banking

A regulation arising from a Competitions and Markets Authority remedy to drive competition and innovation in retail banking. The intent of Open Banking is to give customers better control and access to their financial data, currently controlled by banks. Banks are required to make customers' transactional data available to third parties (with the customers' explicit consent) in order that the customer can make use of the third parties' services. There is also a requirement for banks to allow a third party to make bank-to-bank payments on behalf of their customer, although this is not used in the affordable credit sector today

Cutting through the jargon

Cloud

A network of computers and data storage made available via the internet to individuals and organisations to run their applications and store their data. It's like plugging into the national grid instead of generating your own power.